

THE UNIVERSITY
OF ILLINOIS

LIBRARY

720.5

ARB

v.1

CENTRAL CIRCULATION BOOKSTACKS

The person charging this material is responsible for its renewal or its return to the library from which it was borrowed on or before the **Latest Date** stamped below. **You may be charged a minimum fee of \$75.00 for each lost book.**

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

TO RENEW CALL TELEPHONE CENTER, 333-8400
UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

MAY 08 1997

MAY 19 1997

When renewing by phone, write new due date below
previous due date.

L162

1895

VOLUME
ONE

FEBRUARY
AUGUST

LIBRARY
UNIVERSITY OF ILLINOIS
URBANA

THE BUILDERS' JOURNAL

AN ARCHITECTURAL REVIEW

APPEALING TO THOSE ENGAGED IN

THE ART OF BUILDING

IT is our aim, our ambition, our aspiration even, to build our Journal worthily and well, not for the hour only, but for future years; for the few men in the forefront of an enduring and a laborious Art; for the disciplined ranks of a distinguished Profession; for the young men—Architects to be—and for all who love a clustered column or a flying buttress, a traceried window or a Greek frieze, for the man, too, who honestly plumbs a jamb. . . .

TALBOT HOUSE

ARUNDEL STREET STRAND

LONDON

CONTENTS.

- ABBEY:** Cistercian, 396; Holyrood, 20; Westminster, 103, 118, 306, 340; Kirkstall, 286
- Academy, Dummies,** 103
- Adams, Cole A.,** 152
- Admiralty Offices,** 11, 277, 385
- Advantages of Semi-circular Forticoes,** 283
- Air, Room and,** 338
- Aitchison, Professor, on Marble,** 166
- Ancient Jerusalem,** 396
- Announcement, An,** 223
- Antiquarian Relics at Lancaster,** 103
- Antiquity of the Yorkshireman,** 369
- Aqueduct, Twenty millions for,** 237
- Archaeological "Find,"** 161
- Archaeology in the Midlands,** 333
- Architect, County Council and its,** 223
- Architects : of To-day, 106; Society of, 191; Fees, 225, 264**
- Architectural : Association, The, Chat with the President, 42; Plaster Work, 58; Iron and Brass, 90, 110, 114; Specifications, 123; Institute and A.A., 131, 162, 178; Painting and Architecture, 188; Queer side of Profession, 235; Dinner, 200; Tour, 351; Visit to Blythwood, 376; Camera Club, 71; Museum, 295; Ironwork, 47, 63, 78, 93, 109, 142, 158, 174, 238; Modelling, 241**
- Architecture : Advancement of, 18, 38; Irish, 30; First English, 61; Gambling in, 145; and the Misteddof, 152; Chance for London, 178; in Italian Painting, 205; Northern, 209; at Academy, 226, 242, 258; Socialism versus, 234; Anglo-Saxon, 250; and Antiquity, 256; and Design, 252, 268; "Presentable," 314; Magnitude in, 316; of Manchester, 318; in Midlands, 298, 397; in Dress, 86; in Armenia, 116**
- Art : Cast Iron, 82; British, by Stacey Marks, 53; Morality of, 129; Government and, 220; v. Camera, 150, 157; of Tattooing, 69; and Science at Rams-gate, 172; Appreciation, 205; in Venice, 228; Crew School of, 210; Ancient and Modern, 242; Prejudice against English, 267; of Phil May, 269; Gallery of British, 116, 260; Celtic, 282; Struggle in, 333; "Dark Ages" of, 338; Black and White, 380; and Religion, 401; Treasures in Japan, 150; Sale of Treasures, 157; Manchester School of, 308; Japanese Works of, 342; Glasgow School of, 404**
- Artisans at Work,** 139
- Arts, Society of, 36, 52**
- Arundel Castle,** 212
- Ashes and Sackcloth,** 113
- Asylum : a Scotch, 237; Ryhope Lunatic, 231; Bexley County, 247; Upton, 403; Newcastle City, 413**
- Athens : British School at, 353, 364; My Journey to, 365**
- Authority, a Little Brief, 146**
- Averted for a time, 178**
- BAILEY, T. J., 136**
- Barry, C., 319**
- Barry, J. Wolfe, 7, 53**
- Batsfords, Books of the,** 339
- Beauty of London, 305**
- Belcher, John, on Treillage, 219**
- Bentley, John Francis, 344**
- Birmingham : Technical School, 155; Hospital, 190, 237; Architectural Association, 128, 399; and Midland Institute, 333, 397; Association of Mechanical Engineers, 399; School of Art, 199; Conservative Club, 390**
- Black List, Trollope's, 76**
- Blomfield, Sir Arthur, 8, 39**
- Board Bigotry, 322**
- Bradford Society of Architects and Surveyors, 335**
- Bricks, Adhesion of, 6**
- Bridges : Clyde, 309; Bideford, 324; Ker-sham, 358**
- Briggs, R. A., 392**
- Britain, Beautiful, 5**
- British Architectural Association, 135, 335**
- British Museum : 337; Finances, 85; Gold Ornaments, 101**
- Brooks, James : 120; on Architects, 332**
- Brown, Professor Baldwin, 53, 250**
- Brydon, John McKean, 72**
- Builders' Institute of, 71**
- Building : Case under new Act, 93; of the Future, 106; Blow at the Trade, 158; Crisis in the Trade, 174, 232; Tools in Egypt, 162; Models before, 210; New Material, 52; Construction, 253**
- Buildings, Decay of, 31**
- Burlington House, 193**
- Business, An Unhappy, 65**
- Buttresses, 205**
- CALEDONIAN Hill Fort, Ancient, 364**
- Canals : The Greatest, 278; Baltic, 119, 149, 406**
- Cardiff Dispute, 52, 236**
- Carlisle Architectural Society, 62**
- Carlyle's House, 118, 198, 247, 386**
- Caroe, W. D., 200, 212**
- Carpentry : Roman, 397; Japanese, 7**
- Cathedrals : Westminster Roman Catho-lic, 169, 200, 261, 299; South London, 353; English and French, 402; York, 100; Salisbury, 4, 389, 404, 408; Canterbury, 36; Llandaff, 117; Peterborough, 102, 119, 132, 140, 260, 269; On wheels, 149; Decoration of St. Paul's, 165, 168, 184, 262; Reredos in Manchester, 166; West Front, Manchester, 94, 212; Restoring Bristol, 214; Lady Chapel, Lichfield, 391; Durham, 130, 290; Laon, 379; St. Andrew's, Scotland, 187**
- Chaldea, In the Land of, 337**
- Chapels : Milanese Basilica, 397; Guiseley Wesleyan, 262; Rosslyn, 263; Wolver-hampton Asylum, 308; Rolls, Chancery Lane, 338; Destruction of Spina, 275; Chapel Royal, St. James's, 54**
- Charterhouse, The, 316**
- Chats : F. C. Penrose, 3; Norman Shaw, 29; E. W. Mountford, 42; Leonard Stokes, 55; Julian C. Rogers, 83; Edwin O. Sachs, 115; R. Phené Spiers, 147; Paul Ogden, 202; F. T. W. Goldsmith, 274; H. Greville Montgomery, 66; Prof. Roger Smith, 211; Marquis of Tweeddale, 346**
- Chatsworth, 50**
- Chelsea Embankment, 180**
- Chimes in the City, 187**
- Churches : Doorways of, 238; West Corn-wall, 302; Early Scottish, 381; Eccles, 22; Restoring Welsh, 346; Shoreham, 324, 381; St. John, Clerkenwell, 135; Catholic, Malton, 148; St. Giles, New-castle-under-Lyme, 164; Abbeville, 166; Oakenshaw, 180; Rufforth, 182; Araton, Bolton, 183; St. Mary's, Shrewsbury, 198; St. Bridget, Liverpool, 198; St. David, Denbigh, 199; St. Trophimus, Arles, 199; Christ's, Lancaster, 199; Restoration, Orford, 200; Repairs, Ash-bourne, 215; Crathie, 215, 292; South-port, 230; St. Mary's, Devonport, 231; St. Luke's, Brighton, 246; St. Margaret's, Olton, 261; Darrington, Pontefract, 263; St. George's, Birmingham, 263; St. Mark's, Sheffield, 276; St. Mawgan, Cornwall, 277; St. Sidwell's, Exeter, 278; Presbyterian, Newcastle, 279; St. Bartholomew the Great, 292, 340; St. Cuthbert, Halsall, 309; St. Peter's, Eaton Square, 39, 325; Lindfield Parish, 325; Bradworthy Parish, 326; Treeton, 327; St. Saviour's, Southwark, 340; Elstow, 341; St. Leonard, Turner's Hill, 342; St. Eustache, Paris, 342; St. John's, Bognor, 357; St. John, Leipzig, 358; Reredos, St. Peter's, Landrake, 373; St. Luke's, Farnworth, 375; St. James, Handsworth, 388; All Hallows, 19; of Lord Beaconsfield, 203; Decorating Gothic, 146; Llandudno, 158; St. Mary Overy, Southwark, 353; Decoration of Medieval, 395**
- Clarke, Somers, 376**
- Clay : Famous Speeton, 349; Extracting Stones from, 52**
- Clifford, H., 70**
- Clock : The Largest, 53; Wonderful, 181**
- Coins : Lord Ashburnham's Greek, 198; Bronze, 230; Roman, 406**
- Colclutt, Thomas, 24**
- Colour : Symbolism of, 146; Ancient, 306; Irish Marbles, 377**
- Competitions : Stray Thoughts on, 103; Coventry, 319, 354, 393; as to Fees, 264; Eye Infirmary, 393; Chester Baths, 408; Sea-side Bungalow, 48, 141; Village Club House, 104, 239; Swimming Baths, 208, 304; Crew School of Art, 210; Village Church, 304, 410; Cottage Hospital, 384; Sunderland Infirmary, 20; German, 87; Hotel, Waverley, 88; Cottage Homes, Cheshire, 213; Durham Sewage, 230; Ipswich Workhouse, 244; Settlement Building, Gordon Square, 295, 354; Aston Cottage Homes, 308; Memorial Church, Berlin, 343; Art at Kensington, 391**
- Craftsmen : 289; Class of, 219, 354**
- Crane, Walter, on Design, 252, 268**
- Crew School of Art, 210**
- Crown in Europe, Heaviest, 411**
- DARENTH and its Roman Remains, 151, 307**
- Decoration, No Dinner and Some, 130**
- Derby Metallurgical and Engineering As-sociation, 387**
- Design in its Decorative Aspect, 363**
- Destruction of Edinburgh, 290, 322, 346, 362**
- Discovery of a New Race, 163**
- Does Honesty Pay? 114**
- Dover Harbour, 101**
- Drawing with Hot Air, 194**
- Dry Rot, How to Prevent, 147, 164**
- Dundee Institute of Architecture, 144, 240**
- Durham : Chapter House of Cathedral, 130; Bishop Lightfoot Memorial, 290; and Northumberland Archaeological Society, 206**
- ECCLES Church and Tower, 22**
- Edinburgh : New Memorials, 253; De-struction of, 230, 323; Architectural Association, 31, 71, 95, 98, 156, 175, 222, 240, 271, 335; Master Builders' Asso-ciation, 37; Baths, 342**
- Edis, Robert, W., 88**
- Edison, T. A., 21**
- Egypt : Tools in Ancient, 162; "Wren" of Ancient, 412**
- Egyptologist's Collection, 338**
- Electric : Traction, 282; Leeds, 54; Rail-way in London, 314**
- Electricity : from Water Power, 77, 102; Making, 413; at Edinburgh, 166**
- Elizabethan House, Yorkshure, 378**
- Engineers : Municipal and County, 36, 220, 245, 320; Society of, 61, 71, 222, 287, 304, 351; Institution of Civil, 71, 93, 182, 191, 271, 351; Civil and Mechanical Society, 98, 175; Institute of Junior, 222, 244, 359; Manchester Association of, 134; Institute of Mechanical, 14, 183**
- Engineering Accomplishment, 305**
- Essex Archaeological Society, 416**
- Etching, 70**
- Examinations and Lectures, 211**
- Excavations : Athens, 214; at Silchester, 180; Der-el-Bahri, 390; Medum, 44**
- Exeter, Albert Memorial, 376**
- Exhibitions : The Building, 97, 139; Arts and Crafts, at Manchester, 170; Painters in Water Colours, 70, 170; Railway, 276, 316; "Wedgwood," at Burslem, 310, 331; Pottery, University College, 348; Design, Birmingham, 363; Indian Art, Earl's Court, 100, 365; Fine Art Society, 69; Art Loan, Guildhall, 84, 148; Society of Wood Engravers, 84; Sheffield Art Crafts, 87, 116; East London Industries and Arts, 100; Pictures, Toynbee Hall, 101; Nijni-Novgorod, 102; Paris Universal, 116, 132, 247; Walker Art Gallery, Liverpool, 116; Royal Society of British Artists, 117; Pottery, Weston Museum, Sheffield, 119; Fine Art, Whitechapel, 132; Sir John Tenniel, 133; Industrial, at Athens, 134; New English Art Club, 149; French Gallery, 151; Art Furniture, 166; Goupil Gallery, 199; Amateur Art, 213; Art of Ancient Egypt, 215; Champs Elysees Salon, 215; Liverpool Spring, 228, Society of Women Painters, 260; Dudley (Art Gallery), 292; Scottish Art, 294; Home Arts and Industries, 295; In-stitute of Painters in Water Colours, 311; Wood Carving, 324; Geographical, 404; Manchester Health, 207**
- FACE to Face, 66**
- Fans, Concerning, 38**
- Fees, Competition as to, 264**
- Field, A New, 321**
- Finest Villa in the World, 298**
- Fire Resisting Tree, 413**
- Fletcher Banister, J.P. : 104; on Specifica-tions, 123**
- Florence, Henry Louis, 264**
- Ford, Edward Onslow, R.A., 408**
- Forefathers of the Hamlet, 47**
- Fountains at Manchester, 356**
- France, In North, 379**
- French View of London, 248**
- Frescoes : A "Find," 194; House of Lords, 52; at Royal Exchange, 270**
- GAINSBOROUGH as an Investment, 344**
- Gas : and Oil Engines, 255; Manufacture, 5; Paper Piping, 7; Testing, 148**
- George, Ernest, 56**
- Gildard, Thos., 370, 387, 402**
- Glasgow : Theatre Fire, 79; School, 171; Notes from, 301; Architect on Some Older Ones, 370, 386, 402; Empire Palace, 403; Institute of Architects, 62; Architectural Association, 95, 144, 222, 287; Philosophical Society, 98; School of Art, 271, 404; Technical College, 183**
- Glass : Stained and Painted, 6, 36; Use of Green, 63**
- Gold Medalist, The, 17**
- Goldsmith, F. W. T., 274**
- Goodwood, 22**
- Gothic : Italian, 82; Colour Decoration, 146; Fourteenth Century, 156**
- Granite Pavement, 6**
- Graving Dock, The Largest, 409**
- Greek : Locks, 186; Coins, 198**
- Guildhall Pictures, 189**
- HALIFAX Sewerage System, 246**
- Hall, Edwin T., 319**
- Havre, Sewage Disposal, 203**
- Heat, Low Fireplaces give most, 203**
- Heathcote, Charles H., 200**
- Hohenzollerns, Homes of the, 330**
- Holloway, Henry, 124**
- Hot Air, Drawing with, 194**
- Hospitals : Christ's, 36; London Dental, 86; Birkenhead, 86; Walsall, 119, 149; Liskeard Cottage, 246; Glasgow Samari-tan, 247; Rotunda, Dublin, 277; Sheffield, 196, 236; Royal Free, 390; Birmingham, 190, 237; Fever, 60; Ventilating, 237**
- House of Commons, 99**
- Houses : Historic, 170; Medieval Manor 18; Thoresby Hall, 22; Maldwell Hall, 36; Petworth, 38; Cornelius Vander-bilt's, 68; Bute House, 181; Bentley Priory, 182; Cecil Rhodes', 170, 198; Cottage Homes, Essex, 293; Hopetoun, 310; Model, Killamarsh, 372; Carlyle, 118, 198, 247, 386; Staplefield, 168; Tur-bury, 70**
- Humburg, 2**
- Hunt, Holman, Lectures by, 267**
- IDEAL City, An, 177**
- Indian Art at Earl's Court, 365**
- Industrial Union, National, 88**
- Industry : Ancient Decorative, 42; Revi-ving an English, 204**
- Infirmary : Bridgnorth, 198; Bethnal Green, 85; Manchester, 117**
- Institutes, Northampton, 293**
- Interior, A Fine, 3**
- Imperial Institute, 276**
- Impressions, No. 1, Manchester, 232**
- Imprudent Millions, 81**
- Irish Architecture, 30**
- Iron : Economies in Manufacture, 138; Belgian, 68; and Steel Institute, 148**
- Ironwork, Architectural, 47, 63, 78, 93, 109, 142, 158, 174, 238**
- Italian : Gothic, 82; Painting, 205**
- Islay Stones and Crosses, 318**
- JAPAN, Painting in, 74**
- John Jerry! 113**
- Judge and Jerry, 257**
- KING'S Cross Station, 133**
- Kirkstall Abbey, 286**
- LABOUR and Learning, 114**
- Labouring Men, 47**
- Lambeth Palace, 22**
- Lee, Stirling, 53; Panels, 282**
- Leeds : Notes, 347; Baths, 36; Insanitary Areas, 135; and Yorkshire Architectural Society, 20, 61, 156; Building Trades' Federation, 246**
- Leek Technical School, 204**
- Leeming, Joseph and John, 5**
- Legal : Dilapidations, 21; Imperial Insti-tute, 71; Architect's Libel Case, 71, 84; Bricks Unfit for Use, 167; Architects' Fees, 293; Flat Law, 162**
- Levellings Spirit, 321**
- Libraries, Free : Birmingham, 228; Abing-don, 327; Hammersmith, 342; St. George's, 343; Ryland's, Manchester, 372**
- Light Railways, 17**
- Lighthouses : Europe and America, 172; Spurn, 212; Adams, E., on 173**
- Lightning on a Monument, 172**
- Lincoln's Inn Fields, 37**
- Lincolnshire : Architectural Association, 255; Archaeological Society, 320**
- Liskeard Guardians, 322**
- Liverpool : School of Architecture, 221; St. George's Hall, 282; Old, 84; Archi-tectural Society, 12, 95, 222; Engineering Society, 71, 128, 191, 222, 255, 304, 367; Geological Society, 156; Ruskin Society, 191**
- Llandudno Memorial Church, 159**
- Lockwood, F., on Drawing, 157**
- London : Facts about, 76; New Line to, 107; Architectural Feature of, 163; Beauty of, 305; Supposed Site of, 171; French View of, 248; Electric Railway, 314; Rights of Way, 224; and Middlesex Archaeological Society, 175**
- Lucas, Seymour, 251**
- MANCHESTER : Cathedral, 94, 212; Arts and Crafts, 170; Health Exhibition, 207; Sanitary Conference, 190; Architecture of, 318; Impressions, 232; Infirmary, 117; Society of Architects, 14, 108, 191, 202; Association of Engineers, 134; Canal, 149; Art Gallery, 245; Fountains, 356; School of Art, 308**
- Marbles, Colours of, 377**
- Mattos, Henry Teixeira de, 349**
- Measure for Measure, 65**
- Mechanics and Stability of Structures, 205**
- Medieval Embroidery, 52**
- Memorial : Cross at Plymouth, 216; Izaak Walton, 134; Henry Purcell, 197; Shake-speare, 197; Payne-Smith, 213; Sir R. Montgomery, 228; Bishop Pelham, 247; Volunteer, Exeter, 261; Dean Elliot, 357; Nelson, 409; Institute, Pitlochry, 374; Randolph Caldecott, 406; Albert, Exeter, 376; Bishop Lightfoot, 290; St. Giles, Edinburgh, 253; Church, Llandudno, 159**

Men who Build: Sir Arthur Blomfield, 8; Thomas Colcutt, 24; Aston Webb, 40; Ernest George, 56; John McKean Brydon, 72; Robert W. Edis, 88; Banister Fletcher, 104; James Brooks, 120; T. J. Bailey, 136; Cole A. Adams, 152; W. B. Richmond, 168, 184; Charles H. Heathcote, 200; William White, 216; E. R. Robson, 248; Henry Louis Florence, 264; G. H. W. Loughby, 280; William Young, 296; Edwin T. Hall, 312; Ernest Newton, 328; John Francis Bentley, 344; Romaine Walker, 360; Somers Clarke, 376; R. A. Briggs, 392; Edward Onslow Ford, 408
 Metal in Roman Buildings, 314
 Millers, Francis, 229, 235
 Miller, Jean Francois, 29, 44, 62, 76
 Modelling, Architectural, 241
 Models before Building, 210
 Monodated Progressivism, 49
 Montgomery, H. Greville, 66
 Monument: Lightning on, 179; to Garibaldi, 118; Arc de Triomphe, 118; Marcellus, 134; at Manipur, 261; Llewellyn ap Griffyd, 261; Dr. Johnson, Lichfield, 294; Luther, Berlin, 326; Sergeant-Major Allen, 358; Grace Darling, 390; Archbishop Thomson, 406; Argyll, 253
 Moorish Stucco, 204
 Morris, William, on Peterborough Cathedral, 140
 Mosaic: Venetian, 152; at Greek Church, 5, 37
 Mountford, E. W., 42
 Municipal Buildings: Pump Room, Harrogate, 197; Bath, 292; Birmingham Markets, 391; Art Gallery, Reading, 294; Glasgow, 326
 Museums: South Kensington, 373; British, 85, 101, 337

NASMYTH, James, 69
 National Gallery, 262
 National Portrait Gallery, 117, 245
 Nelson: Memorial, 409; Relics, 359
 New York Licks Civilisation, 402
 Newcastle: City Asylum, 413; Society of Antiquaries, 338; Improvements, 244
 Newton, Ernest, 328
 Nickel Steel, 166
 Nigg Cross Slab, 282
 Norman Towers, 381
 Northern Architectural Association, 128, 271, 320, 383, 394
 Nottingham Architectural Society, 175

OBITUARY: Reginald Stuart Poole, 19; Ewan Christian, 33; Sir Henry Rawlinson, 66; Sir Geo. Scharf, 162; Prof. Huxley, 328; Henry Moore, R.A., 329; Robert Fitch, 151; Edwin J. Miles, 167; J. E. Hodgson R.A., 311; T. Chatfield Clarke, 340
 Observation, On, 12, 28
 Ogden, Paul, 202
 Oldham Grammar Schools, 266
 Old-World Essex Borough, 365
 On Fire, 115
 Organ in Bach's Time, 351
 Ourselves, 1, 7, 17, 34, 225
 Oyez! Oyez! Oyez! 71

PAESTUM, Greek Temple at, 130
 Painters: in Water Colours, 170; Peacock, 98
 Paints, Ancient Art of Preparing, 156
 Palace: Lambeth, 22; Frescoes in Westminster, 103; Hampton Court, 213; An Assyrian, 153; "of the Peak," 50
 Papers Read: On Observation, 12, 28; Simplicity in Architecture, 26; Plaster Work, 58; Fever Hospitals, 60; English Architecture of Middle Ages, 61; Stray Thoughts on Competitions, 108; Iron and Brass, 90, 110, 114; Specifications, 123; Sound in its Relation to Buildings, 126; Modern Lighthouse Service, 172; Use and Abuse of Marble, 186; Relation of Painting to Architecture, 188; Treillage, 219; Queer Side of the Profession, 229, 235; Characteristics of Pre-Conquest Architecture, 250; Influence of Architectural Style upon Design, 252, 268; Cistercian Day, 396; Ideals of Painting, 53; Waves and Vibrations, 53; Professor Woodward on The Earth, 70; Sefton Church, 84; Some Early Christian Anti-

quities, 87; Modern Opera Houses and Theatres, 87; Art of Holman Hunt, 118; Animal Forms met with in Early Art, 132; Economical Lighting Public Buildings, 134; On Deneholes, 149; The Influence of Art, 196; Rievaulx Abbey, 390; Libraries, 390; Obligations of Universities to Art, 267
 Paris: Plaster Work in, 99; London and, 189
 Parthenon, The, 22, 117, 326
 Pastels, 52
 Paving: Street, 246; in France, 374
 Pennell, Joseph: on Wood Engraving, 92; on Illustrating, 380
 Penrose, F. C.: 3; on Simplicity in Architecture, 26
 Peterborough Cathedral, 140, 269
 Petrie, Professor, 163
 Photography: Possibilities of, 332; Marine, 21
 Picture Making, Secrets of, 250
 Plaster Work: by F. W. Pomeroy, 58; in Paris, 99
 Plumbing, 75
 Plymouth: Memorial Cross, 216; School of Art, 14; Mr. Shires' Lectures, 85, 135
 Pomeroy, F. W., 58
 Porticoes, Semi-circular, 289
 Post Offices: Stirling, 260; Bury St. Edmunds, 260; New General, 223
 Pottery Five Thousand Years Ago, 348
 President of the A.A., 42
 President of the R.I.B.A., 3
 Prevention of Black Smoke, 285
 Professional: Dignity, 33, 62; Rules, 92; Jealousy, 401
 Promise, A, 2
 Proportion, Study in, 302
 Pulpit, Introduction of, 50

RAILWAY: Decorating Stations, 161; Light at Eaton, 165; Reminiscences, Early, 316; Pier Head Station, Liverpool, 166; Manchester, Sheffield and Lincoln, 290; Moorgate Street Station, 295; Manors Station, Newcastle, 342; Snaefell Electric, 357; Light, 17
 Ramsgate, Technical School for, 172
 Rawlinson, Sir Henry, 66
 Rebuilding of London, The, 209
 Record Office, New, 132, 163
 Removing a Stigma, 353
 Reputation, A Great, 273
 Rhodes, Cecil, 170, 198
 Rhyl, Marine Lake for, 283
 Richmond, W. B., 168, 184, 391
 "Rights of Way," The, 224
 "Rip and Tear Brigade," 97
 Roadway Making, 111
 Robson, E. R., 248
 Rogers, Julian C., 83
 Roman: Wallis, 394; Carpentry, 397
 Room and Air, 338
 Roscoe, T. Ridyard, C.E., 22
 Rotherhithe Town Hall, 87
 Royal Academy: 228; Professor Aitchison at, 1; The President of, 71, 214, 228; Pictures sold at, 165; Portraits, 213; Schools, 55; Architectural Room at, 194; Sculpture at, 284
 Royal Institute of British Architects, 3, 26; Fever Hospitals, 60; Gold Medal, 94, 332; Acoustic Success, 126; and the A. A., 131, 162, 178; Marble for Decorative Purposes, 186; Work of the, 219; Fellowship of the, 257; Revising the, 270; New Council, 289; Constitution of the, 298; Craftsman Class, 354
 Royal: United Service Institution, 35; Society's Soiree, 194; Exchange Frescoes, 270; New Chimes at the Exchange, 347; Archaeological Institute, 369, 378, 383, 396; Geographical Society, 255; Society of Antiquaries of Ireland, 335; Scottish Society of Arts, 367
 Ruskin, John, 54, 212

SACHS, Edwin O.: 115; Modern Opera Houses, 87
 Salisbury Cathedral, 4, 408
 Sanitary: Manchester Conference, 190; Institute, 71, 87; Proportions of Room, 238
 Sanitation in Scotland, 330
 Scarborough, Castle Hill Road, 167
 Scharf, Sir George, 162
 Schools: Leek Technical, 204; American in Greece, 164; of Art for Crews, 210; of Architecture in England, 221; Oldham Grammar, 266; Woolwich National, 101; Primary in France, 165; Blackburn Higher Grade, 168; Science and Tech-

nology, Liverpool, 180; at Wigan, 182; Technical and Free Library, Nelson, 182; Sefton Park, Liverpool, 183; of Art, Birmingham, 199; Queen Mary's, Walsall, 230; New National, Leeds, 247; Walton National, Liverpool, 263; Trinity College, Dublin, 311; Marischal College, Aberdeen, 356; of Fine Arts, Paris, 388; Hugh Myddleton, 389; Bristol Cathedral, 407; Birmingham Technical 155; Plymouth Art, 14; Manchester Art, 308; Glasgow Art, 404; Ramsgate Technical, 172; Winsford Verdun Technical, 409
 Science at the Royal Society Soiree, 194
 Sculpture: at Academy, 284; British Museum, 166; Restoration at Ely Cathedral, 260; by Prince Louis Napoleon, 278; Bust of Lord Tennyson, 279; A Comparison, 284; Maudslay Collection, 102
 Sewage Disposal in Havre, 203
 Seward, Mr., and the Architects' Society, 52, 236
 Shaw, R. Norman, 29, 147
 Sheffield: Silver Plate, 126; Society of Architects and Surveyors, 87, 156, 230, 320, 383; Central Schools, 189; Art Appreciation, 205; New Hospital, 196, 236; Condemned Area in, 386; Art Society, 367; Junior Engineering Society, 399; Old Town Hall, 85; New Water Way, 103; Physical College, 134; New Town Hall, 134, 357, 405
 Shrines, Arrangement of, 380
 Silchester, Excavations at, 180
 Singer, J. W., on Iron and Brass, 90, 110, 114
 Slow Revival, 145
 Small Dwellings Wanted, 129
 Smith, Prof. Roger: 4, 211; on Architecture and Kindred Arts, 228
 Socialism v. Architecture, 234
 Society Meetings: Mechanical Engineers, 14; Plymouth School of Art, 14, 31; Manchester Society of Architects, 14, 108, 191; Edinburgh Architectural Association, 31, 71, 95, 98, 156, 175, 222, 240, 271, 335; Antiquaries of Scotland, 31, 255; Leeds and Yorkshire Architectural Society, 61, 20, 156; Society of Engineers, 61, 71, 222, 287, 304, 351; York Architectural Society, 61, 95, 222; Carlisle Architectural Engineering and Surveying Society, 62; Glasgow Institute of Architects, 62; Liverpool Engineering Society, 71, 128, 191, 222, 255, 304, 367; Sanitary Institute, 71, 87; Institute of Builders, 71; Institution of Civil Engineers, 71, 98, 191, 271, 351; Liverpool Architectural Society, 12, 95, 222; Glasgow Architectural Association, 95, 144, 222, 287; Civil and Mechanical Engineers' Society, 98, 175; Birmingham A.A., 128, 399; Northern A.A., 128, 271, 383, 394; Surrey Archaeological Society, 144; Dundee Institute of Architecture, 144, 240; Sheffield Society of Architects and Surveyors, 87, 156, 230, 320, 383; Liverpool Geological Society, 156; London and Middlesex Archaeological Society, 175; Nottingham Architectural Society, 175; Liverpool Ruskin Society, 191; Society of Architects, 36, 191; Royal Society, 194; Durham and Northumberland-Archaeological Society, 206; Association of Municipal and County Engineers, 36, 220, 320; Institute Junior Engineers, 222, 244, 359; Lincolnshire Architectural Association, 255; Royal Geographical Society, 255; East Riding Antiquarian Society, 266; Glasgow School of Art, 271; Suffolk Institute of Archaeology, 320; Lincolnshire Archaeological Society, 320, 335; Bradford Society of Architects and Surveyors, 335; Royal Society of Antiquaries of Ireland, 335; British Archaeological Association, 335; Newcastle Society of Antiquaries, 338; Yorkshire Geological Society, 349; Royal Scottish Society of Arts, 367; Derby Metallurgical and Engineering Association, 367; Sheffield Art Society, 367; Royal Archaeological Institute, 369, 383; Birmingham and Midland Institute, 397; Somerset Archaeological Society, 399; Sheffield Junior Engineering Society, 399; Birmingham Association Mechanical Engineers, 399; Association Master Builders, 412; Builders' Benevolent Institution, 416; Essex Archaeological Society, 416; Society of Arts, 36; Edinburgh Master Builders' Association, 97; Manchester Association of Engineers, 134; Sussex Archaeological Society, 247; Surveyors' Institute, 260
 Soho, The Last of, 154

Somerset Archaeological Society, 399
 Something Easier, 49
 Spiers, R. Phené, 147
 Spirit Levelling, 321
 Stability of Structures, 205
 Statues: Memorial Lord Coleridge, 69; Mrs. Sarah Siddons, 164; Queen, Royal Exchange, 168; Burns Centenary, 181; to Dickens, 182; Lord Strathmairn, 244, 278; at Scottish Gallery, 293; Cromwell, 326
 Steel, Resistance of, 276
 Stokes, Leonard: 20, 55; on Observation, 12, 28
 Stonehenge, 276, 407
 Stone and Sand, 354
 Stones and Crosses, Islay, 318
 Stourhead Cross, 132
 Strike: Wanted a Preventor, 274; Douglas Painters', 68
 Structures, Wooden, 226
 Stucco, Moorish, 204
 Suffolk Institute of Archaeology, 320
 Sulphuric Acid, 255
 Sun Dial, Restoring a, 179
 Surrey Hills to Strand Temples, 66
 Surveyors' Institute, 83, 183, 260
 Sussex Archaeological Society, 247
 Sutcliffe, J. D., on Warming and Ventilating, 14

TALCEN Mawr, Removal of, 199
 Tangye, Sir Richard, 5
 Tarn's Halls, 135
 Teak Forests of Siam, 245
 Terra Cotta, 10
 Theatres and Fire, 65
 Thornycroft, Hamo, 341
 Tiles, Early Use of Burnt, 51
 Tomb, A Great Conqueror's, 314
 Town Halls: Sheffield, 134, 357, 405; Clerkenwell, 298
 Tower at Oban, 343
 Trades Unions, 2
 Trains to Pass Over Each Other, 316
 Treillage: Trellis Work, 219
 Trinity House Fiasco, 172
 Trollope's Black List, 76

VANDERBILT, New Villa for Cornelius, 298
 Ventilating a Tunnel, 98; Sewers, 80
 Villa, A Suburban, 370

UNIVERSITY Hall, the New, 234
 Upton Asylum, Enlargement of, 408

WALES, University College of, 87
 Waldstein, Dr. 52
 Walker, Romaine, 360
 Wallis, Mr. Whitworth, on Decorative Work, 333
 Wall: What is a? 253; of Ice, 20; Old London, 277; The Great China, 406
 Walsall Hospital, 119, 149
 Wanted—A Site! 337
 Water at Last, 33
 Watering Place, A New, 333
 Waterloo to the City, 14
 Water Power, Electricity from, 77
 Webb, Aston, 40
 "Wedgwood," 331
 Weir's Patent Sluice, 52
 Wembley Park Tower, 276
 Westminster: New Catholic Cathedral, 169, 200, 261, 299; Approach to, 244, 284, 295; Enlargement of Abbey, 306; Pulpit in, 69; Should Abbey be Added to? 385
 Whall, C. H., on Architecture, 188
 Wheel, The Graydon, 196
 Where the Mother of Parliaments Falls, 82
 White, William, 216
 Whitechapel, Pictures in, 130
 Whitehall, Early Builders of, 173
 Willoughby, Geo. H.: 280; on Competitions, 108
 Winchester, 45
 Winsford Technical Schools, 409
 Wood Engraving, by Joseph Pennell, 92
 Wooden Structures, 226
 Wood Pavement: 71, 369; And Granite, 6
 Workmen's Dwellings, 34

YORK: Architectural Society, 61, 95, 271, Sewerage Works, 375
 Yorkshire Archaeological Society, 229
 Young, William: 296; on Marbles, 186

ILLUSTRATIONS.

ABBEY, Waltham, 81; Tintern, 363
Aberlady Church, 293
Adams, Cole A., 152; sketches, 152, 153, 154
Admiralty Buildings, Ripley's Old, 1
Admiralty Offices, New, 10, 11
All Hallows Church, 18, 19, 23
All Souls, Peterborough, 242
Altar Plate Design, 311
Amsterdamsche Poort, 273, 295
Architectural Ironwork, 63, 78
Ashbourne Church, 209, 214
Assurance Office, Metropolitan, 46
Asylum for the Blind, Manchester, 234
Austin, H., sketch, 7, 21

BAGGALLAY, Frank T., sketches, 161, 163, 165, 171, 182, 183
Bailey, T. J., 136; sketches, 137, 138, 139
Barfreston Church, 68
Barnard's Inn, Corner of, 7, 21
Barry, J. W., 53
Batsford, B. T., 339
Beauey on Loire, 182, 183
Beaver Lodge, 163
Begg, J., 291
Bentley, J. F., 344; sketches, 344, 345
Bickley Hall Stables, 328; Farm Buildings, 387
Billiard Room Door, 105
Bishopgate Institute, 243
Blackburn Technical and Trade Schools, 281
Blenheim Palace, Organ at, 361
Blind, Asylum for, Manchester, 234
Blomfield, Sir A., 8; sketches, 9
Blythwood Dairy, 16
Board Schools, Moss Side, 277
Book Cover Design, 261
Boscombe, St. Andrew's Church, 226
Boveney Court, 305
Bowden Church, 225
Briggs, R. A., sketches, 385, 391, 392, 393, 395
Brooks, Jas., 26; sketches, 18, 19, 23, 120, 121, 122, 123
Brydon, J. McKean, 72; sketches, 73, 75
Buchan Hill, 49, 58; Interior, 97
Buller's Wood, 321, 329; Interior, 330; Front, 331
Bungalow, Sketches of Seaside, 140, 141, 145, 149, 150, 151, 155, 157, 393

CARÔE, W. D., sketches, 16, 291
Cartoon in St. Paul's Cathedral, 169, 170
Carved Stone Panel, 8
Castor Church, 20
Cathedrals: St. Paul's, 3; Le Puy, France, 9; Notre Dame D'Orcival, France, 9; Perugia, 9; Winchester, 45; Rochester, 65; Canterbury Cloisters, 70; St. Paul's (cartoon), 169; Wells (Chaplain House), 177; Llandaff, 179; St. Paul's (Apse), 184, (Dome), 185; St. Trophime (Cloisters), 195; Exeter (Leads), 213; York, 299, Westminster, 344, Nave, 345
Catholic Church at Folkestone, 54
"Cedric," sketches, 140, 141
Central Hall, New Gallery, 246, 247
Central Library, Chelsea, 75
Chair in Parish Church, Deal, 325
Chapter House, Wells Cathedral, 177; Llandaff, 179
Charlton Church Tower, 121
Chatsworth, 50, 51
Chatterton, F., sketch, 81, 84, 85
Chelsea Vestry Hall, 73; Central Library, 75
Church of the Good Shepherd, 23
Churches: All Hallows, 18, 19, 23; Castor, 20; St. Bartholomew the Great, 38, 39, 43; Folkestone (Catholic), 54; Barfreston, 68; Stone, 69; Swainsthorpe, 85; Worth, 120; Charlton, 121; Plaxtole, 123; New Boston, 197; Ashbourne, 209, 214; Dunster (Screen), 215; Lyndhurst, 216; Battersea, 217; St. Saviour's, Highbury Grove, 218; Bowden, 225; St. Andrew's, Boscombe, 226; All Souls, Peterborough, 242; Aberlady, 293; Emanuel, West Dulwich, 311; St. Mary Overy, 341; St. Mark's Venice, 348; North Walsham (Sedilia), 373; St. Martin's, Brighton, 377; St. Mary's, Stretton, 378, 379; New Shoreham, 407
Clark, Somers, 376; sketches, 377, 378, 379
Cloisters, Canterbury, 70; St. Trophime, Arles, 195
Close Gate, Salisbury, 98
Club, A Village, 72, 245, 254
Club, New Conservative, Glasgow, 89
Cobham College, Fireplace, 71
Colcutt, Thos., 24; sketches, 117, 119, 243
Cold Harbour, Liphook, 243
Colleges: Magdalen, 22; Owens, 232

Commercial Union Assurance Interior, 212
Competition Designs: Bungalow, 140, 141, 145, 149, 150, 151, 155, 157; Swimming Bath, 303, 319
Convalescent Home, Entrance, 258
Coombe Farm, 264
Cottage at Staplefield, 161, 171; Bromley, 165; Isle of Wight, 263
Coventry Municipal Buildings, 355, 356, 357
Cresting, Roof, Swainsthorpe Church, 85
Crowland Bridge, 99
Crucifixion, A, 349
Cub Stealer, The, 397

DAIRY, Blythwood, 16
Deansgate, View of, 232
Designs for: Ceiling, 154; District Offices, 163; Academy, 186; House, 202, 313, 392, 395; Lodge, 202; Sculpture at Society of Painters in Water Colours, 241; Village Club House, 245; Book Cover, 261; Theatre, 265; Altar Plate, 311; Font and Cover, 373; Memorial, 375; Wrought Iron Grille, 401; Village Church, 410, 411
Destruction of Edinburgh, The, 323, 346, 347
Detail of Terra Cotta Front, 371
Dining Room Fireplace, 391
District Offices, Design for, 163
Dobson, D. B., sketches, 145
Doorways: Cobham College, 66; Rochester Cathedral, 65; Llandaff Cathedral, 389
Downing, B., sketches, 375
Dunster Church, Screen, 215
Durham University, Staircase, 193

EATON Hall, Entrance Gates, 94
Eaton, W., sketches, 389
Edinburgh, The Destruction of, 323, 346, 347
Edis, R. W., 83; sketches, 89, 90, 94
Emanuel Church, West Dulwich, Font, 311
Entrance Gates: Eaton Hall, 94; Hume-wood, 113; The Palace, Shaftesbury Circus, 117; Town Hall, Manchester, 233
Exeter: Cathedral, on the Leads, 213; Volunteer Memorial, 261
Eye Hospital, Manchester, The, 234

FARM Buildings, Bickley Hall, 387
Fellows-Pryne, G. H., 291
Fireplaces: Buchan Hill, 58; Cobham College, 71; Design, 391
Fires: Glasgow Theatre, 79; Hamburg, 115
Fleet Street Front, A, 90
Fleming, O., 291
Fletcher, Banister, sketches, 98, 100, 101, 102, 103, 104, 105, 129
Florence, H. L., sketches, 257, 264, 265
Folkestone Catholic Church, 54
Font, Emanuel Church, West Dulwich, 311; Design for, 373
Ford, E. Onslow, 408

GEORGE, Ernest, 56; sketches, 49, 57, 58, 97, 106
Glasgow: Theatre, Fire, 79; Municipal Buildings, 297
Godwin, S. H., sketches, 149, 150, 151
Goldsmith, F. T. W., sketches, 273, 274, 275, 279, 289, 291, 295, 343, 405
Gosford House, 396; Staircase, 403
Gray's Inn, Library for, 237
Greek Church Mosaic, 4, 6, 20, 21, 22, 36, 87
Greenslade, S. K., sketches, 261

HADDON Hall, Window, 84
Hall, E. T., 312; sketches, 312, 313, 315
Hall, Trotters Cliff, The, 249
Hardwicke Hall, 325
Hart, A. H., 291
Heathcote, C. H., 200; sketches, 201, 203, 211, 212, 220, 309
Heywood Municipal Technical School, 131
Home, An Island, Loch Allan, 167
Hooper, F., 231
Hospital, Manchester, The Eye, 234
House: near Presteigne, 153; at Buxton, 200; Leicester, 237; Dorset, 231, 259; Interior at Bedford, 253; Stockport, 280; Ivy Hatch, Ightham, 312, 315; Sutton Coldfield, 326, 327; Oxted, 385; Northwood, 392; Queen's Gate, 395
Hugh Middleton Schools, 138, 139
Humewood, 113

IMPERIAL Institute, 17, 24, 25, 26, 27, 227
Institute: Victoria, 223; Bishopgate, 243; Blind, Manchester, 309
Ironwork, Architectural, 63, 78

Irwin, C., sketches, 181
Ivy Hatch, Ightham, 312, 313

KING Street, Manchester, 201

LADY Chapel, York Minster, 299
Ladywell, 101
La Maria Bergamo, Maggiore, 165
Lavender Hill Schools, 136
Leek, Silk Technical Schools at, 204
Leeming, John, 5; sketches, 10, 11
Leeming, Joseph, 5
Leenside, Nottingham, 242
Le Puy Cathedral, 9
Library, Chelsea, 73; Gray's Inn, 267
Llandaff Cathedral and Chapter House, 179; Doorway, 389
London School, A, 251
Lyndhurst Church, Wall Painting, 216

MAGDALENE College, 22
Malloes, C. E., sketches, 33, 39, 43, 177, 179, 193, 195, 242, 299, 355, 356, 357
Manchester: King Street, 201; Trust Building, 203; Rylands' Memorial, 220; Bowden Church, 225; Owen's College, 232; Town Hall, 233; Asylum for the Blind, 234; Eye Hospital, 234
Mayor's Chair, Parish Church, Deal, 325
Memorial Design, 375
Metropolitan Assurance Office, 46
Miller, F. T. W., 229
Mitchel, A. B., sketches, 20, 22
Modern House, A, 196
Montgomery, H. G., 67
Moore, Theo., 291
Mosaics from Greek Church, 4, 6, 20, 21, 22, 36, 37
Moss Side School Board, 277
Motcombe, 57; Interior, 59
Mountford, E. W., 42, 291
Municipal Buildings: Glasgow, 297; Coventry, 355, 356, 357
"Myron," sketches, 319

NATATIUM, View of the, 369
Nazareth House, Bexhill, 55
Neptune, Temple of, 129
New Admiralty Offices, 10, 11
New Boston: Tower of Old South Church, 197; Club House, 199
New Conservative Club, Glasgow, 89
New Gallery, Central Hall, 246, 247
New Scotland Yard, 107
New Shoreham Church, 407
Newton, E., sketches, 321, 323, 327, 328, 329, 330, 331, 387
North Walsham Church, Sedilia, 373
Northwood, House at, 392
Notre Dame D'Orcival, France, 9

OAK Door in Billiard Room, 105
Ogden, Paul, sketches, 196, 202
Old Dutch House in South Africa, 198
Old Hall at Worsley, 229
Old Homestead at Gomshall, 181
Organ at Blenheim Palace, 361
Oriel Window, Haddon Hall, 84
Owen's College, 232

PALACE, The, Shaftesbury Circus, 119
People's Palace, The Tower, 307
Perforated Carved Stone Panel, 8
Perkin, G., sketches, 258
Peverery, 41
Pite, S. Beresford, 291
Plaxtole Church, 123
Plough Road Schools, 137
Porch, A, 275
Pratt, H. W., 291
Pulpit, The Cathedral, Perugia, 9

QUEEN'S Tower, Imperial Institute, 25

RANSOME, A., sketches, 227
Redroofs, 56
Reredos, Solihull Church, 387
Rhinefield, 353; Interior, 359; Frontage, 360
Richmond, W. B., 168; sketches, 170, 184, 185, 186
Ripley's Old Admiralty Buildings, 1
"Robin Hood," sketches, 245
Robson, E. R., sketches, 246, 247, 248, 249, 251, 307
Rochester Cathedral, 65
Rockleigh, Exeter, 274
Rogers, J. C., 83
Romaine-Walker and Tanner, sketches, 353, 359, 360, 361, 371, 401
Royal College of Music, 8
Royal United Service Institute, 33, 35
Rylands Memorial, 211, 220

SACHS, E. O., 115
Salford School Board Offices, 133
Salisbury, Close Gate, 98
San Fermo, Tower of, 257
Schools: Heywood, Technical, 131; Board Offices, Salford, 133; Lavender Hill, 136; Plough Road, 137; Hugh Myddelton, 138, 139; Leek, Silk and Technical, 204; A London School, 251; Moss Side, 277; Blackburn, Technical Trade, 281; Rochdale Technical, 283
Scott and Morris, sketches, 258
Screen at Dunster Church, 215
Sculpture: Gallery, Chatsworth, 51; Society of Painters in Water Colours, 241
Sea-Side Bungalows, 140, 141
Shaw, Norman, sketches, 107
Shiplake Court, 68
Silchester, Roman Tools, 135
Silk and Technical Schools at Leek, 204
Sketch, A: Banister Fletcher, 98, 103; of Alkmaar, 279; F. T. W. Goldsmith, 343
Smith, W. H. Seth, 291
Solihull Church, Reredos, 387
Spiers, R. Phené, 147
St. Andrew's, Boscombe, 226
St. Bartholomew the Great, 38, 39, 43
St. Ermin's Mansions, 315
St. Mark's, Venice, 348
St. Mary's, Stretton, 378, 379
St. Martin's Church, Brighton, 377
St. Mary, Overy, 341
St. Paul's Cathedral, 3; Cartoon, 169, 170
Apse, 184; Dome, 185
St. Saviour's, Highbury Grove, 218
St. Trophime, Arles, Cloisters, 195
Stabling at Churchill, 102, 103; Bickley Hall, 328
Staircases: Imperial Institute, 17; Buchan Hill, 49; Durham University, 193; Gosford House, 403
Stokes, Leonard, 55; sketches, 54, 167, 242
Stone Church, 69
Summer Cottage, Isle of Wight, A, 263
Sun Dial at Wharton House, 223
Swainsthorpe Church, Cresting, 85
Swimming Bath, Design Competition, 303, 319

TEIXEIRA de Mattos, H., sketches, 337, 349
Temple of Neptune, 129
Terrace, Trotter's Cliff, The, 248
Terra Cotta Front, Detail of, 371
Theatre: Fire, Glasgow, 79; Design for, 265
Thermae of Fiesole, 369
Tintern Abbey, 363
Tools found at Silchester, 135
Tower of: Charlton Church, 121; Old South Church, New Boston, 197; San Fermo, Verona, 257; People's Palace, 307
Town Hall, Manchester, 233
Townsend, G. Harrison, sketches, 243
Trotter's Cliff: The Terrace, 248; The Hall, 249

VESTRY Hall, Chelsea, 73
Vicarage, Wick, 77
Victoria Institute, 223
View of: Deansgate, Manchester, 232; The Natatium, 369
Villa: by Banister Fletcher, 100; at Hendon, 104
Village Club, A, 72, 245, 254
Village Church, Design, 410, 411
"Violet," sketches, 155, 157
Volunteer Memorial, Exeter, 261

WAKEMAN, Sir Offley, Peverery, 41
Walker, A. G., 87
Wall Painting, Lyndhurst Church, 216
Waltham Abbey, Nave, 81
Waterhouse, A., sketches, 232, 233
Webb, Aston, 40; sketches, 33, 35, 40, 41, 46, 77, 263
Wells Cathedral, Chapter House, 177
Westminster Abbey, South Aisle, 289
West, William, sketches, 209, 214, 216, 218
Wick Vicarage, 77
Willoughby, C. H., 280; sketches, 131, 223, 277, 283
Wilson, H., sketches, 226
Winchester Cathedral, 45
Woodcliff House, 152
Woodhouse and Willoughby, sketches, 131, 223, 277, 283
Worcester, Victoria Institute at, 223
Worsley, The Old Hall, 229
Worth Church, 120

YELLOW House, The, 106
York Minster, Lady Chapel, 299
Young, W., 298, 296, 297, 305, 403

The Builders' Journal.

Vol. I., No. 1.

Tues., Feb. 12, 1895.

ILLUSTRATIONS.

Ripley's Old Admiralty Buildings	1	Portrait of Sir Arthur Blomfield	8
West Front of St. Paul's.....	3	Original Drawings by Sir Arthur Blomfield, A.R.A ..	8—9
Mosaics from The Greek Church, Bayswater	4—6	New Admiralty Offices	10—11
Portraits of Messrs. Leeming	5	The Blythwood Dairy—Mr. W. D. Caröe, M.A.,	
Corner of Barnard's Inn.....	7	Architect	16

CONTENTS.

Ourselves	1	A Fine Interior	3	On Observation, by Leonard Stokes,	
Pro. Aitchison at the Royal Academy	1	Bricks and Mortar	4	A.R.I.B.A.....	12
Humbug	2	Men who build, No. 1,—		From Waterloo to the City	14
Trade Unions	2	Sir Arthur Blomfield, A.R.A.	8	Society Meetings.....	14
A Promise.....	2	Terra Cotta	10	Trade and Commerce.....	15
A Chat with Mr. Penrose	3	The Admiralty Offices	11	Notes and Queries	15
				Correspondence	15

The Builders' Journal.

OURSELVES.



IN the Specimen Issue of "THE BUILDERS' JOURNAL," which was widely circulated through the country, the purpose of the new professional paper was concisely but soundly promulgated. Our promises are fulfilled, and the fulfilment is here before the world of Architecture and Building. Since the Specimen was published, many things have been determined. We print on much better—and much more expensive—paper. Our illustrations are more costly, and come one step nearer to the standard we aim at, and the sixteen pages of letterpress matter, which we give for one penny, is good literature, well handled, and finely printed.

We need hardly seek to emphasize the mode of our introduction. The excellence of our columns commands the support of the professional public, and our modest price—the world subduing PENNY—will take us high upon the crested wave of success into seas hitherto unsailed by the existing professional press. Of that press, or a portion of it, we have the profoundest respect. Its academic profundity inspires a deal of reverence, even if its profundity is too much for the many, and from the North, from the South, from the East and West, a full and unfaltering blast of welcome has poured into the willing ears of "THE BUILDERS' JOURNAL." In the entire ranks of the Architectural profession and of the Building industries, there is a yearning for something more than the existing Building papers give.

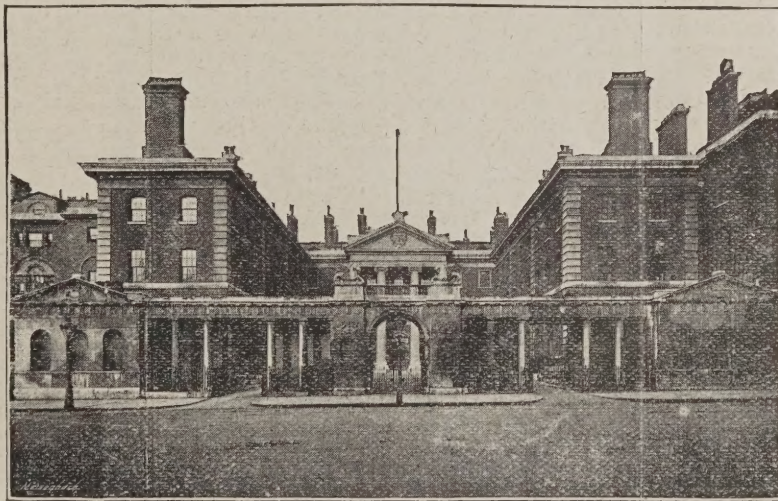
It is that, something more, that we supply. Astonishing as it may seem, statistics—which are carefully considered in these offices—prove that 50 % of Architects *alone* are not *purchasers* of any professional journal. What the other 50 %, and what the host of subsidiary professional men—the largest and really the most important to Trade advertisers—do, we don't know. The answer to so pertinent a fact does not lie with us.

But, be it known, clearly and precisely, the details of our existence. We approach every man connected with the glorious art of Building. The Architect first, because every page of us is architecturally disposed. The workers in all the great industries of

panions, is also acceptable to him, a welcome is his, indeed, because we know he can enjoy us at so little cost.

It is impossible, in a first issue, to arrive at a perfected state. Our improvement will be interesting to watch, for, although it is impossible to give what we are giving, say even to 50,000 men for 50,000 pennies, yet it is possible, by such pluck and enterprise, to become the finest medium in England for the announcements of a much divided industry, which, after all, is the foster brother of every atom of *architecture* the world can boast.

And that we are, even now, that finest medium, in all modesty, knowing what we know, we fearlessly assert.



RIPLEY'S OLD ADMIRALTY BUILDINGS. See page 11.

which Building is the whole, because we shall give them, in truth, every point that can in any sense interest them. And the humble toiler for whom in our inmost heart we have an affectionate regard—the honest, clean, artistic-minded craftsman, who toils and spins, and often reaps but a sorry reward—if he can see in our bright and happy pages aught which, being acceptable to more intellectual com-

that they should require the embodiment of the highest aspirations of the land." And then, as if to let us down from such a dizzy altitude, the Professor added—may be in a side whisper, as if he were ashamed of its necessity—"I do not think that these motives are predominant now." Nor do we; but we are improving, without, however, any signs of any great architectural epoch which may be looming in the distant future. One part of the Professor's address interests us deeply. We did not hear it delivered,

Pro. Aitchison at the Royal Academy.

"THE Advancement of Architecture" was the subject of Professor Aitchison's second lecture to the Architectural Students at the Royal Academy, and the date of our own birth, and that alone, debars us the privilege of dealing with it more extensively than we at present are able. The Professor opened his discourse with an assertion that will break the hearts of all those men whose aspirations are as high as his own. He said that architectural advancement is dependent on many influences, two of the most important being these "That the desires of the nation at the time should run in an architectural direction, and

but we can imagine the ring—the full-toned ring of honest advice—with which it entered into the hearts of the students present. We should like to see it printed and presented to the Members of the Architectural Association, so that some of those hairdressers' assistants—if there be any such—of whom Mr. Mountford, the President, spoke in his inaugural address, might see the abyss into which their—shall we say ambition—is leading them. Thus concluded Professor Aitchison:—Let me again recommend to each of you to know yourself, and also to bear in mind the proverb, "All men cannot do everything," and having determined for yourself that you can master architecture, keep at first to those studies only which will enable you to build soundly, without which you cannot be an Architect, to plan conveniently, and to bring your building into the pale of aesthetics, so that it may be decently proportioned, and have some rhythm in it. You will not only make a decent habitation for man to live in, but will bestow on it some of that character and dignity that it behoves every civilised man to require in his dwelling, so that it cannot be mistaken for the den of a wild beast, the shelter for a tame animal, or the hut of a savage. Happily, each branch of architecture is transcendental. You never need fear that you have mastered every branch of the art, or weep, like Alexander, because there are no more worlds to conquer; but when you have mastered the necessary part, there is no reason why you should not try something outside it, which may be called an accomplishment. You must have exercise and recreation for your health, but it is much better for an Architect to be a poor ornamentalist, painter, or sculptor as well, than to have spent twice the time that such a smattering would have taken in learning to knock a ball into a hole with a stick in a close room. Only, recollect this, that with a most exacting profession before you, unless you have abilities of a very rare order, you can hardly expect to be good at your profession and excel in other arts that men have devoted their whole lifetime to master. It is one of the signs of the fascination architecture once had that Brunellescho should have left his sculpture, Bramante and Baldassare Peruzzi their painting to become Architects. I hope that among the students to night there may be a genius who can rival Bacon in the width of his knowledge and the depth of his penetration. Such a man may try to rival the great geniuses of the world, Orcagna, Leon Battista Alberti, Michelangelo, or Leonardo da Vinci, in Italy, who were Mathematicians, Musicians, Poets, Painters, Sculptors, and Architects: Perrault, in France and Wren, in England, are other examples of excellence in various arts. Wren was a scholar, an astronomer, a mathematician, a mechanical inventor, a demonstrator of anatomy, a physiologist, and the pioneer of hypodermic injections, a great constructor, and one of the most prolific Architects that ever lived. Some of his works are beautiful, such as the spire of St. Magnus the Martyr and Bow steeple; St. Paul's is, perhaps, the finest example of the late Renaissance cathedrals, infinitely surpassing St. Peter's in outline and composition. All Wren's plans show a mastery of the art of planning, and some are both original and charming, and all his works have a flavour of the grand style about them. Wren, too, would have been a commanding figure in any of the many arts he learnt or dallied with, but it is the merit of the architecture of his day, that it had the power of attracting to it and absorbing so great and widely gifted a man. As soon as modern architecture can be brought to life again we may look to its attracting some of the greatest men, for, as Aristotle affirmed, it is one of the master arts of the world.

"FROM the gingerbread
Humbug. Gothic of her pretentious build- ings to her ponderous procedure, the 'Mother of Parliaments' is a venerable yet delightful old humbug." That is the second sentence in the first issue of *The Album*, the latest co-operative product of the journalistic stores, over which Sir William Ingram presides. We do not stay to discuss the status of the individual who penned the sentence or of the master mind that passed it, but what, in all humbleness, we wish to suggest to those wholesale dealers in journalistic products, is that they should continue to publish pictures of anything or anybody and leave criticism to those who have the capacity to criticise. Every slut of the stage has been glorified by tricky photography by the firm over which the above-mentioned Baronet has the good fortune to sit. In this particular issue of their stupid work there appears sixteen portraits of sixteen children, possessing sixteen extremely commonplace faces, and the collection is entitled "Our Beautiful Children," all this, in our concrete capacity, we do not object to but when the young bloods of Milford Lane begin to talk Architecture, then we are distinctly justified in interfering. What makes this particular offence more offensive, is the fact that the criticism purports to be the work of a member of the House—we possess our own opinion as to that, and if we be a judge at all, we should say, after reading the whole article, that we do not believe it. If, however, there be a Member of Parliament so utterly devoid of decency and self-respect as to write such rubbish, and to possess such an opinion on what is recognised through Europe as the finest secular building, Architecturally, of the century, then the sooner Sir William Ingram engages a more competent critic, the better for his reputation.

Trades Unions. It is no purpose of this journal to deal with the ramifications of Trades Unions, but an extremely interesting case was in the Courts on Friday last. It was a motion on behalf of Messrs. Trollope & Sons and two of their foremen and six workmen, to restrain the officers of the London Building Trades Federation from publishing a circular headed "Trollope's Black List," which contained the names of workmen who remained in the employ of the Plaintiffs during the continuance of a strike. In October, 1894, Messrs. Trollope entered into a contract for building in Park Lane and Mount Street. On the 24th October, 1894, Messrs. Trollope received a letter from the secretary of the Federation, complaining that Messrs. Trollope had broken an agreement of the 27th June, 1892, whereby master builders had agreed that no workmen should be put under any disability by belonging or not belonging to a Union. The secretary and another member of the Federation then called on Messrs. Trollope and asked them to discharge their two foremen, which they (Messrs. Trollope) refused to do, saying that they and their foremen never made any difference between Union and non-Union men. The Federation then called out all the men of the Union, and 175 men went out. The strike continued until January 14th, when the Union men asked to be taken on again, but Messrs. Trollope in the meantime had filled their places. Subsequently Messrs. Trollope found that a large yellow circular headed "Trollope's Black List," containing the names of workmen in their employ, had been sent to the different lodges of the Federation, and, the Plaintiffs alleged, had been found in the mess room of other workmen. Mr. Justice Kekewich said the question was whether the act complained of was violent or malicious, and intended to do injury to another. His Lordship had no doubt that the Federa-

tion intended their members to be benefited, but that was not the only motive. Without doubt the motive, and the principal motive, was to injure those persons mentioned in the Black List and Messrs. Trollope, who employed them. That was the influencing object of the circular, and was actionable. In his Lordship's opinion, it was clearly a case in which the Court ought to exercise its jurisdiction. All the Plaintiffs were seriously injured in the exercise of their lawful calling, and were interfered with maliciously. It was not right to subject the Plaintiffs to that injury until the trial of the action. He, therefore, granted an injunction until the trial or further order restraining the Federation, their officers, servants, and agents, and the other Defendants by name, from publishing, posting, or issuing the said circular.

We should like, as far as we
A Promise. are able, to define the future programme of *The Builders' Journal*. We would ask our subscribers, first of all, to remember that this, our first number, is likely to be the most imperfect we shall ever publish. It is better to improve than it is to deteriorate, but as to our principal features, we do not intend that "Men who Build," should be an absolutely regular item of our contents, and we want it to be understood—and our intention in this respect has been warmly applauded by perhaps the finest living Artist—that it shall be sufficiently expansive to include any man, be he a member of the Royal Academy, or be he a man who works upon the scaffold, who has done noble work towards the highest conception of building art. We purpose inviting—though until we were in existence, men were chary, as can well be understood, of committing themselves too much—articles or papers from competent men, upon the particular subject they are known to be conversant with. We cannot lay very much stress upon this, because it is one of the peculiarities of professional journalism that non-professional writers have never been known to fulfil their promise of a contribution. However, if our readers appreciate this feature, which we hope they will, we will endeavour to overcome this difficulty. At any rate, we will make the life of the man who promises—and does not fulfil—a perfect burden to him, and perhaps some of our readers who have studied this peculiar development of modern manners, will be willing to offer us a few suggestions. Our chief permanent feature will be "BRICKS AND MORTAR," which, when we have settled down, will contain the cream of comment upon all contemporary matters. We shall discard all profound and academic leaders as beyond our scope. Papers read before Institutions will, in almost every instance, be treated in a special article containing the pith, and the germ without the padding. Our notes on Trade and Commerce will be fearless and without the suspicion of financial motive about them. Our Sawdust will be just what it appears to be, a mass of food without much cooking. Our Tenderings will presently be very full and authentic, and our General Notices, we hope, will not lack interest. From time to time, we shall publish special numbers, if our advertisers are clever enough to make it possible for us to do so. These numbers will consist of a supplement of sixteen pages, dealing with an Artistic or Scientific subject, the first will be published during March, the date will be duly announced, dealing with the exhibits at the forthcoming Builders' Exhibition. If we discover, however, that it is not possible to do this with justice to our motives, we shall not attempt to accent the Exhibition in any way.

A CHAT WITH Mr. PENROSE, M.A., F.R.S.,

President of the Royal Institute of British Architects.

NEXT to Archdeacon Sinclair's charming old house in St. Paul's Churchyard is an insignificant one-story building, upon whose front door the name of Penrose is all but obliterated from the well-worn plate. It is the official address of the Cathedral Surveyor, and thither, whilst the hum of City life is in full tune, you cross over from the beautiful fabric which seems to have an inexhaustible source of inspiration for the man of architectural heart and soul, and seek a moment with the President of the Royal Institute of British Architects. Mr. Penrose has been one of those potent factors in architectural art, whose power ever seems to be present, ever influencing the work of minor men, ever casting its light of love over less able artists, unseen, unheard, almost unknown. If one tried to cast the professional career of such a man, the stepping stones would show out clearly over the flowing waters of its impulse, but there would be none of those monuments on the banks to denote the stopping places of his mind or to trace the growth of his artistic intellect as it expands and pulses with the ordinary man of more work and less worth. Mr. Penrose has possessed a master mind, and he has missed the opportunity of creating material records, and to a man of the highest attainments the one is essential whilst the other is of little moment. Mr. Penrose is not "eaten up" with his own importance. A more mild, humane, retiring man does not live, and so you hear no dramatic history of his life in the few short replies to the queries you are almost ashamed to put to him. He stands at the desk at the rear of the "muddled" office where everything is chaosickled o'er with the pale cast of dust, and age. A plaster model of the dome, plaster models of other portions of the fabric, wooden sections, detail sections, and large scale plans and elevations of every atom of the Cathedral lay hung about the dim religious place in which the light of day filters through dusty windows weeping for the sacreligious mass of humanity passing to and fro on the pavement outside.

In keeping with the character of his surroundings, Mr. Penrose stands with clasped hands waiting for your questions with the resignation of a saint awaiting his doom. The extremely classic face, far more severe in its features than anything Wren ever created, has lines of deep thought running over it, and behind the glasses which he habitually wears, the eyes are closed the while he dips into the details of the past, and with consummate art parries every attempt to draw him on the decorative questions of the Cathedral.

"I was born in 1836; was articled to Edward Blore; spent twelve months in Messrs. Cubitt's workshops; went to Cambridge, took my M.A. degree; travelled for three years in Italy and Greece and less important European countries; came back and started in practice."

Mr. Penrose is not given to over elaboration of detail.

"And then?"

"Well! practised, principally in the country, built two and restored many churches, and in London did nothing of greater importance than the Choir School in Carter Lane opposite."

"And of the Cathedral?"

"Oh! I followed Professor Cockerell, of course."

"Elected!"

"Appointed by the Archbishop of Canterbury, the Bishop of London, and the Lord Mayor."

"Of the decorative—"

"Pardon me! I have nothing to do with the decorative scheme of the Cathedral; Mr. Richmond, the associate of the Academy, has been appointed to superintend the work. Mine is to watch the fabric of the Cathedral and keep that in preservation."

"But who advised the gilding of the iron railings under the dome?"

"Ah! that is stopped. It was not good, and it took the eye away from Steven's mosaics in the pendentives."

"Which, Mr. Penrose, you have always approved of?"

"Yes, they are very beautiful and in the position where colour was most wanted."

"You have no opinion to offer on the reredos erected some years back?"

"None. It was Messrs. Bodley & Garner's work, and of its kind extremely fine."

"You have never discovered any alarming deterioration in the stability of any part of the Cathedral?"

"You love the Cathedral, Mr Penrose?"

"Yes. It is in my opinion the greatest classic exterior in the world. St. Peter's has no doubt a nobler interior, but there is nothing known to Europeans which quite comes up to the external grandeur of St. Paul's. Its front is beautiful beyond any conception."

"You are the year's President of the Royal Institute, Mr. Penrose?"

"Yes! the Council asked me if I would fill the chair, and I accepted."

And at this sublime height of modesty it would have been painful to have proceeded further, so you accepted the pleasing smile, modest also in its fervour, the kindly shake of the hand, and the good wish that accompanied it, and as you closed the dusty door of the dusty "Chapter House" behind you, you deemed it unnecessary further to extol the virtue of a man who has so silently, but so surely, made his mark upon the Architectural history of his time.

A FINE INTERIOR.

INTERNALLY the most beautiful house in London is unquestionably

Mrs. Mackay's town mansion in Carlton House Terrace. Some few years back, when Mr. Charles Sandford called in Messrs. Ernest George and Peto to advise him as to the embellishments of his house, he gave them absolute discretion and an expenditure which was positively to be unlimited, and those who have seen the result of this somewhat unique commission do not doubt that Ernest George put every atom of his soul into the work. The entrance hall, 38 feet by 25 feet, is entirely lined with marble, the panels of which are pink Soudanese, divided by statuary pilasters, carved into fine renaissance detail. The pavement is of the choicest marble, the ceiling of blue and gold gessowork, and the chimney piece in the Italian style of the fifteenth century, and the carved frieze, 3 feet deep, are the work of George Frampton. The dining-room is panelled in mahogany up to the ceiling, with a deep frieze of carved panels, partly gilt in the style of Henry II., the margins of the lower panels being inlaid with satin wood; the ceiling has wood coffers, with the whole central portion domed and decorated with finely modelled figures in ivory colour on a gold ground. The drawing-room is superb in the Palladian style of the Italian sixteenth century; the ceiling has its panels filled in with paintings and the walls divided

with pilasters, the wall panels being filled with grey and gold brocade. The library is dado-panelled in Italian walnut, "filled in" with gilded leather, the ceiling being of inlaid walnut coffered work, the panels and frames being inlaid with boxwood. Indeed, so luxurious is the entire house that the ceiling of the grand staircase is coffered with wood and gessowork in blue and gold, the coffers themselves being filled with star-shaped flowers, the petals of which are carved from mother o' pearl, and the two bath-rooms are lined with luxurious marble, one in the Pompeian style and the other Japanese, with representations of pomegranates, orange trees, lotus plants, fishes and storks. It is but just to remark that Messrs. Collinson and Lock, the existing Oxford Street firm, devoted the utmost care to the execution of the decorative and marble work under the personal supervision of the architect.

THE town council of Crewe propose erecting a school of art and technical institute at a cost of £3,000.



WEST FRONT OF ST. PAUL'S.

"None whatever. The New City Underground Railway Company wanted to construct a Station at the corner of the Churchyard, but we strenuously opposed it, and the House of Lords' Committee very wisely upheld our opposition. Although the 'tube' will run very close to the foundations there is not the slightest fear of any damage being caused by that."

Smilingly, you ask Mr. Penrose if he ever had the intention of washing the outside of the Cathedral?

"The question is too ridiculous to answer," is his reply, "the sooty coating only forms on those parts not exposed to the weather, so that were there any virtue in the washing suggestion, a few months would bring back the old condition of things."

"And, even if such a thing were advisable, the contract would be an extremely heavy one."

"We have no contracts now! It is some years since any work to the Cathedral was not done by our own staff of workmen."

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
12th February, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

I DROPPED upon this aphorism in this way. Wanting a foundation stone upon which to build this weekly batch of BRICKS AND MORTAR I had ransacked the recesses of my brain, and my stock of reference works to find one, and none would suit. It is a dangerous occupation this quotation hunting, for what is sauce for the goose is not always sauce for her gentleman friend, and the more I struggled to discover something fresh and telling, the more unconsciously I was drifting to the *Seven Lamps* burning as brightly as they did some five and forty years ago.

It was at Brocket Hall, Lord Mount Stephen's delightful home in Hertfordshire, that I struck oil; and I was sitting in the library, in the room and in the very corner where Lord Palmerston died. After turning over a number of volumes I came across the 1880 edition of Ruskin's famous work, and on the page at which the book opened—a page under the "Lamp of Sacrifice"—there, in big, bold type, appeared the paragraph I have quoted. A cold perspiration came over me as I read it. "I

am no advocate for meanness of private habitation," are the words of the sage. "I would fain introduce into it all magnificence, care and beauty where they are possible; but I would not have that useless expense in unnoticed fineries or formalities; corning of ceilings and graining of doors, and fringing of curtains, and thousands such; things which have become foolishly and apathetically habitual—things on whose common appliance hang whole trades, to which there never yet belonged the blessing of giving one ray of real pleasure, or becoming of the remotest or most contemptible use—things which cause half the expense of life, and destroy more than half its comfort, manliness, respectability, freshness and facility."



MOSAIC FROM THE GREEK CHURCH,
BAYSWATER.

I HAD been visiting during the day several cottages on the estate—"with a deal floor and roof, and a hearth of mica slate"—and I glanced round the beautiful room in which I was then standing, and wandering back through the luxurious saloon, through the most "sublime" morning room I had ever seen, up the glorious central staircase and through the Japanese and French suites, I heaved a heavy sigh of remorse and inwardly blessed "the unnoticed fineries and formalities; corning of ceilings and graining of doors, and fringing of curtains and thousands such," and for the honour and glory of English architecture I wondered what our homes would be without them. But I chose the professor's words as the foundation stone of these paragraphs, because they show how sublime must be his soul, and how fast the world moves on to its artistic degradation. One wonders what "Brantwood," on the Cumberland hills, is like, and why it should be filled with Turner's marvellous works, his daring, his wondrous detail, his profligacy of colour, and his grandeur, when the great teacher is so simple in his desires. And rich marble churches! like dust drops upon the map of Europe for the lowly-minded men who live between deal floor and roof and a hearth of mica slate.

BUT Ruskin does not mean to be taken literally. He slashes at the cheap and nasty detail, the hideous mouldings, the wretched carvings, the sham marbles, the filthy grainings, and such like horrors of our homes. And truly we should be wise to heed his words, to abolish from the puny habitations most of us frequent the over-wrought, over-balanced detail, and fussy richness, and in their places give simplicity and grace and truthfulness. And, therefore, the *Lamp of Sacrifice*,—of all its sister lights shall be the motto of the house I herewith build, yet architects and builders, craftsmen and workers in the greatest industry of mankind, dare not hope to live anywhere near the ideals of John Ruskin. The tide of mediocrity is too strong. But the world is the richer, and architecture, what we possess of it, is the healthier for his teachings, and as far as it is able with propriety to do it, the *Builders' Journal* enrolls them in its creed.

THE EDITOR.

PROF. ROGER SMITH, of University College, —the Professor, by the way, must be getting into the sere and yellow leaf, for he was past the meridian when I knew him, a number of years ago—has a very excellent method, and knows as much about the "Practice" of Architecture, as any man in London. He does not, I believe, hold a very high position for his artistic qualities, and has but little liking for anything that takes design away from the fundamental principles of the recognised "Styles," but he is a stickler for professional etiquette, and an arbitrator of much repute. The Professor is guilty of an excellent story, which he religiously imparts to his classes every year. A certain engineer constructing a new railway, specified that the concrete material should be even in size, and of nothing larger than what could be got into a man's mouth. The contractor being a bit of a wag, kept to the letter of his contract, and was never seen on the works unless accompanied by a stalwart nigger, six feet or more, in his stockings. The engineer was perplexed by the presence of this man whenever he met the contractor on the works, and one day he asked his subordinate what the devil he wanted a blackie always hanging on to his coat-tails. The contractor with a very serious expression on his face, approached the specification writer, and in bated breath, begged him to be careful what he was saying, for the nigger was no less a personage than the concrete gauge.

THE Sunday evening lectures, at Toynbee Hall, on our English cathedrals have been resumed. At the initial lecture the Rev. J. W. Tait told the story of Salisbury Cathedral, first taking his hearers back to Old Sarum and its cathedral within a fortress, a witness of the close association between ecclesiastical and military power, and then on to the building of the new cathedral in the valley, the first stone of which was laid by Bishop Poore, in 1220. The population followed it, and a new city grew around the new temple. In 1540 there were no people left in Old Sarum, yet it continued to exist as a borough, and in 1831 eleven electors returned two Members to Parliament, when Birmingham did not return one. Dean Stanley had said: "Salisbury is all glorious without, and Westminster is all glorious within." Henry III. was said to have determined on the rebuilding of Westminster through the influence of Salisbury. It was the earliest church in the new Pointed style, of which it still remains the most perfect example.



MOSAIC FROM THE GREEK CHURCH,
BAYSWATER.

ITS greatest feature is its spire. Salisbury is the only completely homogeneous cathedral in England, and it is, moreover, purely an English cathedral. It is an example of Early English in its simplest, purest form, and Early English is more national than the Norman architecture which preceded it, or the Decorated which followed it. There is no strong emphasis in Salisbury Cathedral. It was not the conception of any individual, but of English art in the first half of the thirteenth century. It has the beauty of grace rather than that of power. "Divinely tall, and how divinely fair," it was feminine in its loveliness. It is distinguished in the perfect harmony of its surroundings. It is set in one of the greenest and fairest of earth's spots, described by the late Oliver Wendell Holmes as "the apple of the eye of all England;" it seems to have grown as naturally from the grass as the great elms themselves. The tower groups and assorts with the body of the edifice, just as a full-blown rose assorts with its sister buds, and the quiet and dignity that broods over the great church, broods also over the close and the dwellings of its ministrants. Put Salisbury Cathedral on a hill like Lincoln, or in the midst of a close-built Continental town, and it would look out of place. The interior is less satisfying than the exterior. The architect Wyatt wrought havoc here in the last century. He threw the ancient glass by cartloads into a ditch, and consequently there is too much hard, white glare. The lecturer, showing a view of Stonehenge, remarked that between Stonehenge and Salisbury Cathedral, were all the steps of architecture. The one was a triumph of rude energy, or brute force; the lofty beauty of the other was a triumph of science, which reared the stones and kept them in their place.

London has gone mad, for the moment, over Photographic Albums. Mr. Stoddart, the American, came over with a portfolio of wonderful photographs of the world's most interesting places, and straightway flooded

the land with them. So well and so carefully was this done that the returns have proved a perfect gold mine to the lucky individual, and £60,000 is the profitable result of his labour. The second series of twelve portfolios, each of sixteen views of "Beautiful Britain," has just been completed, and every lover of the beautiful should hasten to procure a set; for anything more superbly printed has never been seen this side of the Atlantic. The lovely views of Longleat, of Welbeck, Audley End, Hatfield House, and of a dozen more of the grandest piles in the country eclipse anything ever seen in photographic reproduction.

Compare these with a wretched publication called "The Album," a journal of photographs of men, women and the events of the day; the first number of which is on our table. Amongst other photographic illustrations therein is an interior of Westminster Hall, which is disgracefully executed, evidently from a very ancient negative. Blind followers of the photographic art must learn the failings as well as the triumphs of the camera, and that where large masses of deep shadow occur in a "view," such as in the sacred precincts of Westminster Hall, the steel engraver alone can approach fidelity of reproduction, and, unfortunately, the Americans are centuries ahead of us in the art of printing.

THE MOSAICS from the Greek Church at Bayswater, which are scattered through this number, and will be continued in subsequent issues, are of the twelve apostles, and form—together with the central figure of Christ in the dome—the finest specimen of mosaic decoration in the kingdom. It is impossible even by the aid of photography to give the slightest conception of the grandeur of this work. The figures, apart from the pedestals on which their names are inscribed, are 30 feet in height. Mr. G. M. Mecenero was the Artist of these panels, and we believe the entire cost was defrayed by a member of the congregation. Although it is two years since this fine piece of decorative work was completed, we have no knowledge of its previous publication, which we are happy to think is well worthy of it.

MR. LIVESEY, the great authority on coal gas, and the head worker of the largest gas company in the world, has been lecturing to the students of the Goldsmiths' Institute on "Gas Manufacture," and from his lecture, upon which we commented in our specimen, many interesting facts are obtainable. Coal gas was first used for lighting purposes in 1797. The first undertaking to supply London with gas was by the National Light and Heat Company, formed in 1806. Others rapidly followed, and the competition at last "became intolerable." Five competing companies, sometimes, would have five different mains in the same street! In Walworth Road, in 1853, there were eight mains; now there are but two. In 1853, the five companies that served the Metropolis south of the Thames, agreed to parcel the districts into convenient areas, each company getting a compact district instead of one straggling, so to speak, from Dan to Beersheba. In 1860, the north of Thames companies did the same, and from then till now competition has gradually narrowed to a minimum all over the kingdom. In 1850, there were fifteen distinct companies in London; now there are but three. To pay a dividend of as much as 5 per cent. was quite uncommon. Meters were not introduced till 1820. The price of gas has fallen steadily since its introduction. A thousand cubic feet cost in London 15s. in 1820, 12s. in 1832, 8s. in 1843, 6s. in 1848, 5s. in 1850, 4s. 6d. in 1853, 4s. in 1862, and 2s. 4d. (in South London) to-day. The price of labour has about doubled in the last three-quarters

or a century. In 1843, at the Kent Road Works, 7,744 tons of coal were used in producing 72,000,000 cubic feet of gas; in 1893, the coal used was 176,000 tons, and the gas got from it was 1,784,000,000 cubic feet; from which it can be calculated that a ton of coal yields 10,000 odd cubic feet of gas.

THE two Halifax architects, Messrs. Joseph and John Leeming, whose Admiralty work is illustrated on another page, have had a very eventful career since they won the competition which



MR. JOSEPH LEEMING.

or late Elizabethan—of which their new Grammar School of Queen Elizabeth at Heath, Halifax, is a good example; their inmost feeling was classic, and steadily they plodded through competition after competition with varying success, and carried out many important local works. In 1881 they felt their feet a bit when they won a premium in the important competition for the Glasgow Municipal Buildings, and then, two years later, they entered luckily upon what proved to them the foundation of their success. That they accomplished their object is now history, and, in the words of the distinguished architect of the National Portrait Gallery, speaking as the then President of the R.I.B.A., "It is little short of wonderful that whatever its faults of detail may be, so fine a plan and so good an elevation should have been entirely wrought out by men, solitary students in a provincial town, with no special advantages, untravelled, unknown to the world of art, and who have produced drawings of the most remarkable delicacy, which may have been equalled, but never to my knowledge, surpassed for perfect execution; that such drawings as those submitted in each competition should have been prepared in so short a time, as I understand, by two men and a youth working together without extraneous assistance, excepting as regards perspective and figure drawings, whatever else may be said, is undoubtedly a very remarkable example of that 'well directed labour' to which, as the first great President of the Royal Academy said, nothing is denied."



MR. JOHN LEEMING.

THE opposition which the Institute offered to the scheme, and which was backed up very strongly by a professional contemporary, is also history of an ancient type. The opposition succeeded, and the scheme, as it originated, was finally abandoned, and the piecemeal policy, of which the first fruits have just blossomed into ripeness, was the outcome. The objection to the second method of dealing with the great needs of the Admiralty and War departments was that it would be dangerous to erect any very heavy structure in proximity to the old Admiralty buildings. The objection was, however, unnoticed, and there are no signs that, as far as the work has at present proceeded, any fear need be shown that anything of the kind will happen.

MESSRS. LEEMING of course came to London when their rising star drew them thither, and prospered. They gained the first premium in the Edinburgh Municipal Buildings Competition and the second in the Lisbon Post and Telegraph Offices, and they won the competition for the Halifax improvements, comprising arcades, shops, markets, &c., which they are now carrying out at a cost of close on £70,000. Whatever faults may be found in a keen critical survey of their work, there is an unpretentious charm about it, which is not always so readily noticed in the work of their artistic superiors. The Yorkshire grit and stability seem to pervade their artistic methods, and although they have not yet given us any great work, we seem to detect a well-intentioned energy, which will take them very near it.

THIS is hardly the place to go into a deep dissection of the life of Sir Richard Tangye, head of the famous firm of engineers, but a few interesting details cropping up in a contemporary calls one to review the facts of a remarkable career, perhaps more remarkable than those which governed the rising of Lord Armstrong. Five Cornish lads, working together upon their father's little farm, developed a remarkable skill for mechanics. They made working models of engines at home in the winter evenings, while their father looked on dubiously, and lamented the waste of candles. But the mother, with keener perception, recognised the bent of her sons' minds and encouraged it. Truly the candles were not wasted. The fourth brother, now Sir Richard, being physically weaker than the others, was educated for a teacher. Disliking the occupation, however, he abandoned school-teaching at the age of eighteen to seek his fortune in Birmingham, taking a situation as clerk in a small engineering establishment, at a salary of fifty pounds a year. After three years and a-half, during which time his salary had been raised to eighty pounds, he determined to start in business for himself as a merchant, his old friend, Mr. Alderman White, of Birmingham, giving him office-room in his place of business.

MEANTIME, he had persuaded his two elder brothers, skilled mechanics, to come from Cornwall and join him. Together they planned and started a business as machine-makers, renting a workshop at four shillings a week in a back street, behind a baker's shop. One dark night to their little shop came an agent of Brunel, the engineer. He had heard that "Tangyes" had invented and were manufacturing an hydraulic jack, which he thought might be of use in launching the Great Eastern. Needless to say, he scarcely expected to find what he wanted when he saw the insignificant workshop. But he was soon reassured; the hydraulic jack was produced, and arrangements were quickly made for setting about the famous launch. This order for hydraulic jacks proved to be the

real foundation of the business. As Sir Richard tersely puts it, "We launched the Great Eastern and the Great Eastern launched us."

With improved business prospects the brothers took a larger workshop, at ten shillings a week, and ventured to engage their first workman, with thecaution that they could only guarantee him three months' work. He is, however, still in their service.

By 1859 the business had increased so greatly that new premises were taken in Clement Street, Birmingham, and finally the world-famed Cornwall Works, the largest engineering works in the world, were erected at Smethwick.

As a recognition of his services to education in Birmingham, Richard Tange was knighted a few months ago, about the



MOAIC FROM THE GREEK CHURCH, BAYSWATER.

same time that a fellow workman, T. Salter Pyne, received a similar honour for services rendered to Sir Mortimer Durand on his celebrated mission to the Ameer of Afghanistan. Sir Richard has a very fine Cromwell collection. "I fell in love with Oliver," says the great engineer, "when I was a little boy six or seven years old, because I had early suffered from the intolerance and persecution of the Church. My parents were the only Quakers in the parish, and of course refused to pay the Church rates. Regularly the parson distrained upon their goods. I saw the cow taken, and in consequence lost my bread and milk for breakfast. Another time the pig was seized, and I and my brothers were deprived of the only kind of meat which our hard working parents could afford to give us. Well, you see, I was touched to my stomach, and had a very powerful reason for hating the Church. When I read a book about Cromwell, and how he upset the Church, I thought, 'That is the man for me,' and he became my hero straight away."

The following paragraph appeared in our Specimen Issue, but the matter is so important that we gladly repeat it here:—

"A Report on granite paving by Mr. Wike, the City Surveyor of Sheffield, gives some useful information as the result of observations on the use of granite setts for street paving. The general conclusions to be drawn from the report—says the *Builder*—are in favour of granite paving. It is shown that of a good many accidents from horses falling attributed to the slippery quality of the granite paving, a considerable proportion did not really take place on the granite paving, and that the reports were consequently misleading and exaggerated. In the course of Mr. Wike's report, the following points are urged. In the case of tramway streets, the tramway company, who have to maintain a width of 16 ft. in the centre of the street, would object to keep in repair any material less durable than granite, as it would entail on them additional expense. A

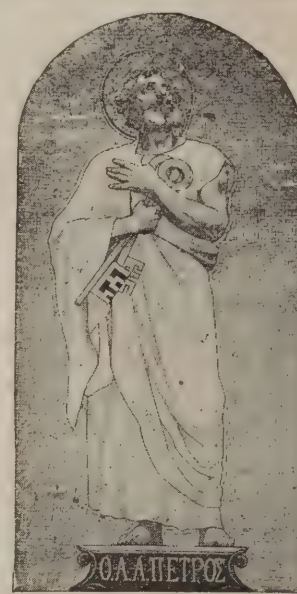
schedule is given of information supplied by the Surveyors of twenty-nine towns in England in which granite pavement is largely used. The observations of these Surveyors as to the durability of granite paving are very striking. The Glasgow Surveyor says "40 years and another 30 after redressing;" Sunderland, "43 years, and then can be taken up and laid elsewhere;" Dublin, "30 years; still in fair condition;" Bury, paving down 8 years, and not a penny spent; say 30 years, then redressed, and 20 years more." Most of the reports are to a similar effect. In Sheffield the granite streets recently laid have been in very flat sections. From various indications in the report, it appears that the chief danger of falls for horses is at the side portions of the streets where the section is rather rounded. The roads laid with "Gritstone" compare with granite very unfavourably as to wear and ultimate cost. The "Gritstone" pavement in High Street, Sheffield, was laid in 1891, cost 10s. 6d. per yard, has been occasionally repaired, and will soon have to be relaid. Some of the gritsetts taken up in 1891 had worn from 10 in. to 4 in. or 5 in. thick; but the time they had been down is not stated. The gritstone laid down in 1891 was not on concrete, but the Surveyor states as his experience that the gritstone pavement wears as quick, if not quicker, on concrete, as on an ordinary foundation. In regard to the life of paving materials, Mr. Wike estimates granite as 20 to 30 years with few repairs, gritstone 3 to 8 years, wood (deal) 5 to 7 years. This is on streets not subject to traction-engine traffic. The comparative cost of wood and granite paving as computed by the City of Manchester, is given as follows:—

WOOD, AVERAGE LIFE, 15 YEARS.	GRANITE, AVERAGE LIFE 30 YEARS.
Initial cost s. d. 14 6	Initial cost s. d. 10 6
Cost of taking up, cleaning and re-paving blocks once during lifetime ... 4 3	Cost of repairs, 30 years, at 3d. per yard 1 3
Cost of ordinary repairs, 15 years at 3d. per yard 0 3½	DEDUCT— s. d. 11 9
DEDUCT value of concrete foundation 19 0½	a. Value of foundation 1 0
Total cost for 15 years 17 0½	b. Value of old setts at time of renewal 3 4½
Average cost for one year say, 1s. 1½d.	Total cost for 30 years 7 4½
	Average cost for one year, say 3d.

It is admitted that granite becomes slippery without constant cleansing. The Paving and Highways Department of Manchester reports that granite pavements have been used for fifty years in their principal streets, "and have answered well when the streets have been properly cleansed, watered, and sanded." In regard to the sanding, it appears from other information included in the report that liberal sanding is much desired by horse-owners, and is always effectual in removing slipperiness, but that it becomes a nuisance to shopkeepers from the sand blowing about. In Manchester, wood-paving is being adopted solely on account of its comparatively noiseless character; it is considered to have no other advantage. The Manchester Paving Department, however, reports that crossings in a particular district paved with small 4 in. granite cubes, were found to be much more slippery than the larger setts.

In the course of his third and concluding lecture at the Royal Institution on "Stained Glass Windows and Painted Glass," Mr. Lewis F. Day dealt with the influence of Renaissance art. He said that concurrently with the later Gothic manner, which lasted until about 1530, there flourished a newer phase of art—the Renaissance. So far, how-

ever, from there being any marked deviating line between Gothic and Renaissance glass, it was often only by the character of some slight ornamental or architectural detail that



MOAIC FROM THE GREEK CHURCH, BAYSWATER.

one could determine in which category a window of the early part of the sixteenth century should be classified. The fact was the Gothic influenced the glass painters almost as long as good work continued to be done, and it might almost be said that with these Gothic conditions in glass painting were inspired by the new enthusiasm. Having dealt with the "Jesse" windows, Mr. Day said that the donor of a window was always a most important person. In early days, however, he was content to efface himself, or at most to appear in miniature and quite modestly in the corner of a window. But in the sixteenth century he was very much *en evidence*, and no scruple would restrain him from putting in an appearance in the very midst of a most sacred subject. Yet the vainglory of such men resulted in the production of works of such consummate art that we in our generation could only be grateful to them. The lecturer concluded with a consideration of the decline of glass design and the characteristics of seventeenth-century windows.

A LARGE number of experiments, says a contemporary, have been lately conducted to determine the adhesion between various cement-mortars and makes of brick. Five kinds of brick were subjected to the test. 1, Hard, well-burnt, machine-made, and repressed bricks, having well-finished surfaces; 2, soft machine-made bricks, used for facing; 3, hard clamp-burnt hand-made bricks; 4, hand-made facing-bricks, softer and weaker; 5, sun-burnt bricks, used for foundations. The cements were:—1, a slow-setting Portland; 2, a quick-setting Portland; 3, a slow-setting slag cement; 4, a moderately slow-setting slag cement; 5, another make of slow-setting cement. Three kinds of mortar were made with each cement. First, 1 part cement to ½ part sand; second, 1 part cement, 1 part sand; third, 1 of cement to 2 of sand. The bricks were carefully cemented together, before which they were soaked in water, and after setting, their adhesion was tested at various dates. From the mean of the experiments, which were repeated four times in each case, it was ascertained that the smooth pressed brick gave a far better hold to the mortar than the rougher varieties—a result unexpected. The table of results show many irregularities. The highest result is for a machine-made repressed hard brick with quick-setting Portland (1 part cement, 1 part sand), which give at 44 days an adherence in pounds per square inch of 106.7 lb., more than 50 per cent. greater than the other results in the same column, showing the greater adhesion of quick-setting Portland of the above proportion to the slower-setting cement.

GAS tight piping, which is at the same time much lighter and less expensive than metal, and very durable, is now being made in America. Strips of Manilla paper, having a width equal to the length of the required tube, are saturated by passing them through melted asphalt, they are then rolled round a metal rod until the proper thickness has been reached. Rolling pressure between two flat surfaces is next applied to consolidate the layers of paper, and after that the metal core is removed, and a coat of waterproof composition is put on outside the pipe.

COMMENT has not altogether ceased about the Commandership of the Bath that was conferred upon Mr. John Wolfe Barry, the engineer, after the completion of the Tower Bridge. But perhaps he glanced through the lists of City Knights, and thanked heaven the honours of such a Knighthood had been withheld from him. Mr. Barry is a veteran in his profession, a man of close on sixty years of age, and the constructor among other things of such an important engineering work as the Barry Docks at Cardiff. Mr. Wolfe Barry's professional inclinations are hereditary. He is the youngest son of the late Sir Charles Barry, the architect of the Houses of Parliament and of some of the most stately buildings in London—the Reform Club, the Travellers' Club, and the College of Surgeons. His first introduction to the class of work for which he has attained much eminence was when he entered the employment of Messrs. Lucas Brothers, the railway contractors. He then became articled to the famous civil engineer, Sir John Hawkshaw, under whom he acted as resident engineer during the construction of Cannon Street and Charing Cross Stations and Bridges. Just over a quarter of a century ago, Mr. Barry commenced practice, and he has since been entrusted with many railway works of great importance, the most recent being the supplemental bridge connecting St. Paul's Station with the London Chatham & Dover Company's line on the south side of the river. Mr. Barry, who has been a member of several Royal Commissions, has found time to lecture and to write books on railway matters. The eminent engineer's eldest brother is Mr. Charles Barry, past President of the R.I.B.A., and the architect who has fruitlessly endeavoured to obtain the completion of his father's plans for the palace at Westminster.

THIS Country has not yet realised with what rapidity the cultivated land in Great Britain is being laid down in permanent pasture. We have over 16,000,000 acres growing nothing but grass, the partial food of horses, cows and sheep. The rate of increase is about 100,000 acres per annum, and what is the moral? In 1891, when the census was taken, there were 74,000 fewer labourers on the land than in 1881. What this means is too evident to want any deep explanation, and what it will eventually lead to in the congested towns and cities, where the labour market is so overcrowded, no one dares to conjecture. Goldsmith's lines are as true as ever:—

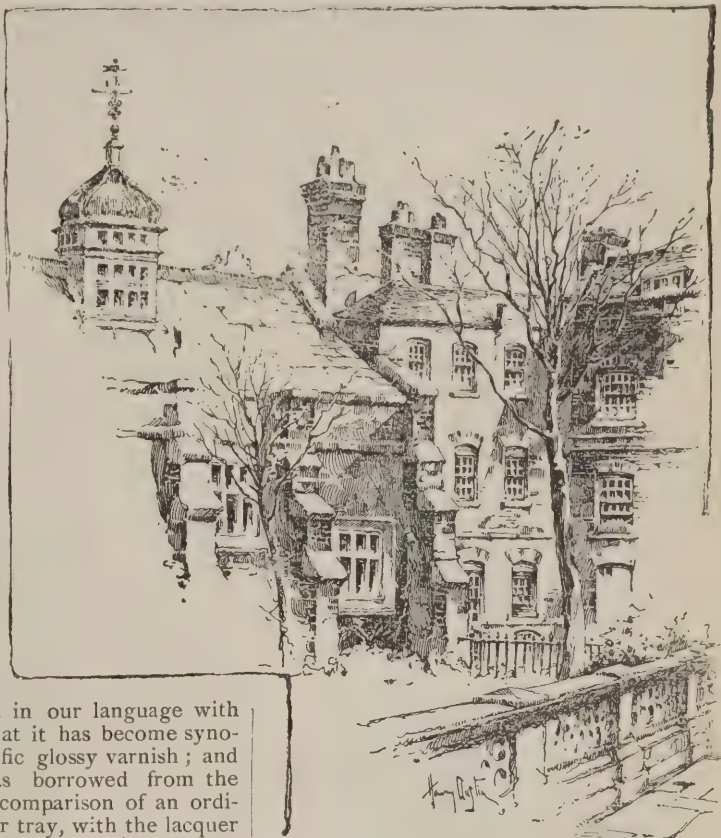
"Ill fares the land, to hastening ills a prey,
Where wealth accumulates and men decay.
Princes and lords may flourish or may fade,
A breath can make them as a breath hath made.
But a bold peasantry, their country's pride,
When once destroyed can never be supplied."

THE Japanese are a nation of carpenters, and with them carpentry is a fine art. In the major constructive arts, the wooden temples and houses, in which the genius of the race for simplicity and thoroughness is most prominent, are fitted together in the highest form of constructive science, however unpretentious their uses may be. The ordinary bamboo fan is a notable instance of the successful way in which the Japanese have combined the maximum of

utility with the maximum of simplicity. Taking as a first hint the natural palm leaf, which is not readily obtainable in Japan, and the addition of a flat surface of paper, they contrived the most flexible, indestructible and economic fan ever invented, which is withal built up on graceful, simple and true constructive lines. The Japanese umbrella is a similar instance, and the original idea was doubtless borrowed from China, but how far superior in finish and taste is the Japanese development? And then the art of the lacquer worker is so intimately associated in our language with the word "Japan," that it has become synonymous with a specific glossy varnish; and yet the process was borrowed from the Chinaman. But the comparison of an ordinary Japanese lacquer tray, with the lacquer productions of the Chinese, at once demonstrates that it has practically become a new invention with the Japs. In Chinese ware there is an opaque surface, generally ornamented with rigid, finicking, monotonous detail, whilst in Japanese specimens there is a translucent surface, combined with freedom and spirit in the decorative treatment, and, as a prosaic matter of fact, far greater durability. But the higher branch of Japanese lacquerer's art which has produced the *lacquer de luxe*, an art combining the most marvellous variety in technical combination with incredible thoroughness in manipulative finish, is beyond the possibility of any comparison whatever.

AND now if our readers will kindly attend more carefully, the Editor would like to speak to them. Our Telephone Number is 35,422, and the sentiments, quite of a personal character, which he is whispering over the wires is of as much interest to them as to us:—

I wish to ask every man to whom a copy of this paper is sent to consider the motive of its production. It has been considered from statistics and facts which we have been careful to collect, that there is an enormous want amongst us for a paper of the character and price of *The Builders' Journal*. There our motive begins and there our motive ends. Each single copy of the *Journal* costs us more than the sum we obtain for it, but this much is said for every journal in existence that is worth its salt. This means a very large sale, and a very large sale means a very powerful medium for our worthy friends who make use of our green-tinted pages. That is logic, unextenuated, and without untruth. But with those good friends I have nothing whatever to do, except to wish them a very happy and a very prosperous connection with *The Builders' Journal*. And now for my last word, if the horrors of the Telephone have not exhausted your patience. Having considered our motive, and approved of it, there are only two possible ways of admiring our pluck and recompensing us for our labour, that is, to send our Manager, to-morrow morning, a Postal Order for three shillings and three pence, enclosed in an envelope with your name and address. You need not even



CORNER OF BARNARD'S INN.

take the trouble to say why you do it, he will know all about that; you will then find every Tuesday morning, lying on your breakfast table, a copy of our *Journal*. Or, if you prefer it, walk round to-night to the book-stall at your railway station, or to the newsagent of whom you regularly deal, and ask him to deliver you a copy every Tuesday afternoon: by this method you obtain the six months' issues for the enormous expenditure of two shillings. Having done that, show this copy, or talk about this copy, to every man you know who will be interested, and depend upon it, that for so trivial, but for so acceptable a service, we shall render you a reward, full and overbrimming in good measure.

SAWDUST.

THE labour dispute in the Douglas, Isle of Man, Building trade, has been amicably settled. The plasterers, who demanded 34s. a week instead of 30s., have accepted 32s. The labourers, who demanded 24s. in lieu of 21s., have accepted 22s. 6d. This agreement is to last for three months.

MR. F. N. MUNDY, of Markeaton Hall, has offered to give to the town of Derby 8½ acres of land, situate between the Ashbourne and Kedleston Roads, and estimated to be worth £8,000, for the purposes of a public recreation ground, subject to certain conditions, including the making of a new street across this land from Markeaton Street to Watson Street. The expenditure which the town will have to incur if Mr. Mundy's offer is accepted has been estimated by the borough surveyor at £8,585.

AUTHORITY has been given to the Bray Commissioners in Ireland to promote a Bill in Parliament for the purpose of raising £38,000. Of that sum £20,000 will be devoted to the completion of the harbour, £6,000 for the purchase of the electric light works and plant at Bray, and £12,000 for sewers, sea-wall, baths, shelter, opening new roads and concreting footpaths.

An inquiry has been held at Nelson relative to a proposed loan respecting £30,000 for works of private and street improvements, £8,000 for sewerage and sewage disposal, £1,641 for a bridge in Leeds Road, and £1,500 for the completion of the Town Hall.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

THE EDITOR does not hold himself responsible for the opinions of Correspondents, whose communications should be brief and plainly written on one side of the paper.

THE BUILDERS' JOURNAL goes to press on Monday at 6 p.m. All matter must reach the Editor by the first post on Friday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments. Subscribers in London or the Suburbs receive their copies by the first post delivery on the day of publication.

Advertising.

CHARGES FOR ADVERTISEMENTS.

SITUATIONS WANTED.

Per line (about 10 words), Sixpence.
Minimum charge, Eighteenpence.
Three Insertions for the price of Two.

SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS, TRADE AND GENERAL ADVERTISEMENTS.

Four lines (about 40 words), Three Shillings.

Each additional line, Sixpence.

Prepayment in the above Advertisements is absolutely necessary.

The charge for Paragraph Advertisements on the Front Page is Fifteen Shillings an inch, single column. Minimum charge, Five Shillings. Paragraph Advertisements on ordinary page, single column, Seven Shillings and Sixpence per inch.

MANUFACTURERS' ANNOUNCEMENTS ON ORDINARY PAGES.

Per Page, Single Insertion, Eight Guineas.

Discounts for series on application to the Manager, who will make Special Contracts for Announcements on Back and Leader Pages and positions facing matter.

NOTICE.—Advertisements for current week's issue are received up to last post on Saturday. Alterations in standing Advertisements must be made before 6 p.m. on Fridays.

Advertisers in THE BUILDERS' JOURNAL may have their replies addressed to the Manager's Office, free of charge, and may have them forwarded if addressed envelopes sufficiently stamped are sent.

Reading Cases, lettered in gold, may be had from the Manager. Price, One Shilling.

THE Town Council of Leicester have decided to build an Art and Technical School, at a cost of about £25,000, on a site belonging to the Borough.

A NEW Vicarage, by Mr. J. Beynon, Architect, is to be erected at Stoneaston, near Bath.

MR. R. H. BICKNELL, C.E., of Lincoln, has issued a supplementary report as to the best means of draining the town of Stamford. He estimates the cost of putting in the connections with the public streets will be £4,000 in addition to the estimate already furnished for laying the main drains.

The Builders' Journal.

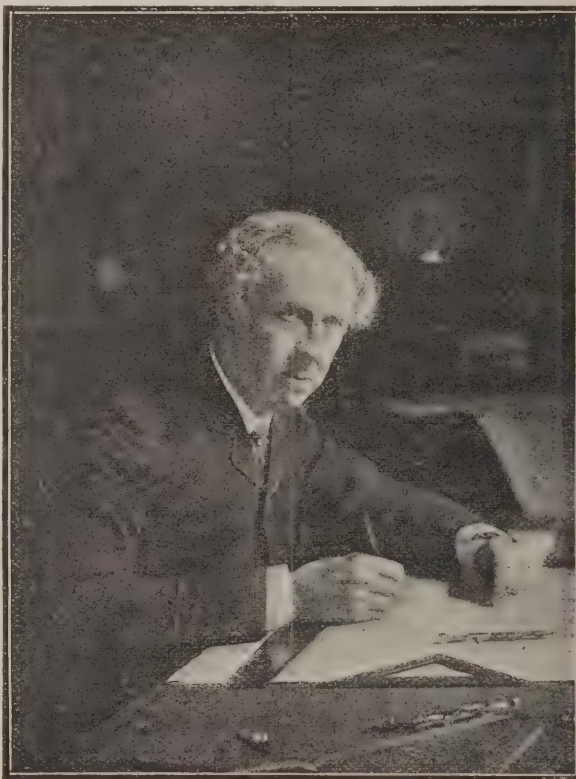
MEN WHO BUILD.

No. I.

SIR ARTHUR BLOMFIELD, A.R.A.



It is opportune indeed that the Architect of the Church House in Dean's Yard, which the Young Members of the A.A. recently surveyed for purposes of study, should be the son of a Bishop, and a tower of strength in his profession. The name of Blomfield is going to linger in the world of Architecture, for although Sir Arthur is the foundation of its greatness, there are others who are following closely and reputably in the same groove. As becomes a son of Dr. Blomfield, Bishop of London, and a man who first saw the daylight from the venerable precincts of Fulham Palace, Arthur Blomfield was sent to Rugby and finally found his way to Trinity College, Cambridge, where in 1851, at the age of two and twenty, he took his B.A. degree, and his Mastership four years later. There was no dalliance when his future career had to be considered, no back door into a snug little rectorship was going to be opened for the fourth son of his "Right Reverend" father, diplomacy was not to be played with, idleness was out of the question, and so a little special study brought the aspiring artist up to the time when he entered the office of the late P. C. Hardwick, to serve his three years of pupilage with a man who was clearly competent to teach. A tour on the Continent with F. P. Cockerell, son of the great Pro-



the generosity of the late W. H. Smith, will recognise a specimen of design unequalled by that of any contemporary. The church of Saint-George, at Cannes, was built as a memorial of the Duke of Albany. This includes a small side Chapel containing a replica of the monument by Sir Edgar Boehm, R.A., in the Memorial Chapel at Windsor. This church was consecrated in February, 1887.



STUDY FOR PERFORATED AND CARVED STONE PANEL—ROYAL COLLEGE OF MUSIC—1893.

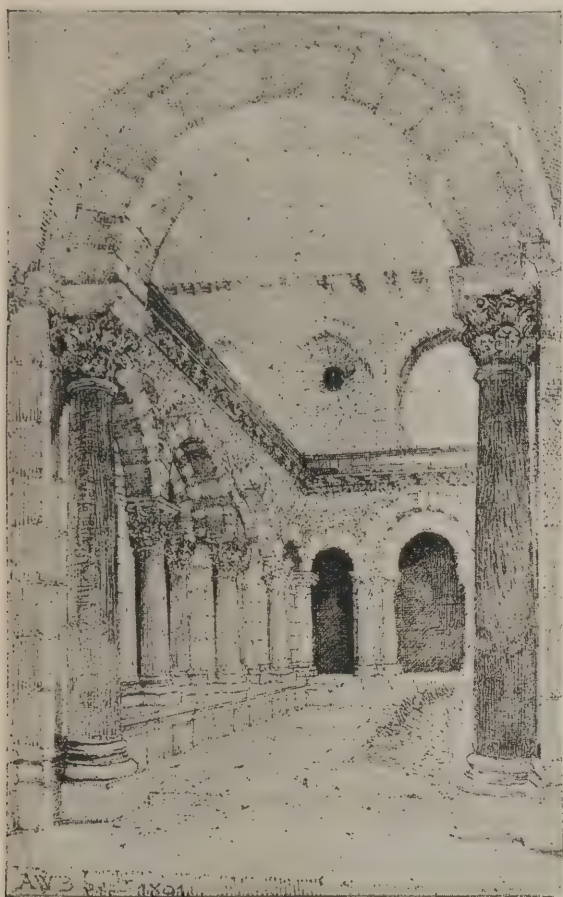
fessor—and a worthy companion in a worthy cause—followed, and then in the year that he went back to Trinity to take his M.A. degree, he began practice as an Architect, and commenced life of professional work which has brought him so much honour and reputation. When he was but thirty years of age, he became President of the Architectural Association—a very different institution to what it

is now—and later became a Fellow of the Institute, without, however, taking a very pronounced interest in the professional societies. During the years which followed Arthur Blomfield did some grand work; he built Denton Manor, in Lincolnshire, for Sir William Welby Gregory, Bart., and this is, perhaps, his most important mansion. He "did" the Bancroft School at Woodford, for the Drapers' Company, the new great school and later buildings at Charterhouse, Godalming, and the new Queen's School and Lower Chapel at Eton College. It was shortly after the opening of this latter work by Her Majesty in 1889, that its Architect received his knighthood, and never an artist of more charming methods than he has earned the recognition which a knighthood is supposed to give. Sir Arthur, as is well known, has been Architect to the Bank of England for many years, and is responsible for that fine building which neighbours poor Street's masterpiece in the Strand.

Londoners also know Sion College Library, on the Thames Embankment, with its fine timber roof, St. Saviour's Church in Oxford Street (1871), the Whitgift Hospital School at Croydon, the new buildings for Shrewsbury School, the Church of St. John, Wilton Road, and the enlargement and remodeling of St. Peter's, Eaton Square, which is a splendid piece of work. Perhaps, however, his Church at Southsea is his masterpiece, and those who have seen that evidence of

the generosity of the late W. H. Smith, will recognise a specimen of design unequalled by that of any contemporary. The church of Saint-George, at Cannes, was built as a memorial of the Duke of Albany. This includes a small side Chapel containing a replica of the monument by Sir Edgar Boehm, R.A., in the Memorial Chapel at Windsor. This church was consecrated in February, 1887.

In September of the same year was consecrated the English church of St. Alban, in Copenhagen. It was by the special desire of the Architects of Copenhagen that an English Architect was employed, and the high approval with which the work was regarded was subsequently shown, when, on the completion of the church, the King conferred upon Sir Arthur the order of the Danebrog, and the



IN THE CLOISTERS OF THE CATHEDRAL LE PUY.
FRANCE, 1891.

Royal Academy of Arts of Copenhagen elected him an honorary member. The little church of St. Moritz is also by this distinguished Architect. On the other side of the Atlantic, Sir Arthur has built the Cathedral of St. George, at George Town, Demerara, which, owing to the nature of the soil, had to be constructed principally of timber, the whole resting on a kind of raft of concrete. Also the church of the Falkland Islands, for which all materials, except the rough building stone and sand, had to be sent from England.

Sir Arthur has, for many years past, been Architect to the cathedrals of Salisbury and Chester, and to the church of St. Mary Redcliffe, at Bristol: but, perhaps, the most interesting work he has had to do in connection with an ancient church, is the rebuilding of the Nave of St. Saviour's, Southwark. The Nave has only lately been completed on the old lines. The repairs of the Transepts are now in progress, and it is hoped that in the course of another year the whole work, commenced four years ago, may be finished.

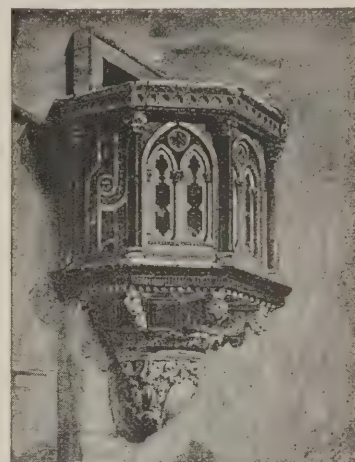
Like most of the leading men of his profession, Sir Arthur Blomfield tucks himself away in one of those quiet West End thoroughfares where the spirit of commercialism is unknown, and where the goddess of art can—if she cares to do so—creep blindfold past the commonplace residences which would make her shudder, should she glance up at them under the light of day. The architecture of Montagu Square and its environs is distinctly not noble, and on the same appropriate footing with the cobbler who badly shoes his own offspring, so again, like most of his fellows, Sir Arthur houses himself in a habitation which pretends to nothing but a complex arrangement of stock

bricks and mortar. But they groan inrepentant agony with the burden of a life's architectural work which covers the staircase walls, and runs over into all the offices and rooms throughout the house. What strikes one as being somewhat unusual in a man of his attainments is, that Sir Arthur Blomfield has been no slavish worker in one particular style, and although his particular period is late Gothic, one detects fine examples of early Gothic, Perpendicular, Jacobian, Classic and Renaissance work, which have come equally well from his fertile pen.

Sir Arthur Blomfield has worked, during the whole of his career, behind the curtain of publicity. His peculiar talents, and his undoubted position in his profession, have made no other course necessary; but, although he strongly disbelieves in the value of any number of letters peculiar to membership of professional societies, he would not, for an instant, dispute the good the Royal Institute of British Architects has done for the improvement of Architects and their art. A man of great modesty, of consideration, and good nature to the younger members of his profession, this Associate of the Royal Academy, of 1888, has taken a noble part in the advancement of art in his own country. He notes with evident delight the improvement in all manner of buildings, traces the higher appreciation of the community for artistic as well as healthy houses in which to live; and if beauty is not to be met with on every hand, the

time is coming, he has no fear, when the whole land will blossom with architectural purity and good taste. As the clocks are striking eight in the chill, wintry mornings, Sir Arthur Blomfield approaches his table for the day's work, and a man who, having

passed the meridian of labour, and arrived at that haven from whence he can survey forty years of brilliant toil and brilliant success, has no need to fear the opinions of his fellow men. Arthur Blomfield is twice married, and has sons of much artistic promise working at his side. Mr. Charles J. Blomfield, who was educated at Charterhouse, and is a Captain in Artists' Corps of Volunteers. The younger, Mr. Arthur C. Blomfield, is, like his father, a Trinity man, and has taken his Bachelor and Master's degrees; this young architect is a remarkably good and rapid draughtsman and much is expected of him. If a word were needed to show Sir Arthur's kindness of heart it is in his appreciative reference to his



EXTERNAL PULPIT, THE CATHEDRAL,
PERUGIA. DRAWING MADE IN 1855
WHEN WITH F. P. COCKERELL.

nephew, Mr. Reginald Blomfield, M.A., about whom we have ourselves much to say. These are Sir Arthur's exact words, "My nephew is not only distinguished for his beautiful drawing and artistic attainments generally, but for his literary power—witness his "The Formal Garden in England."

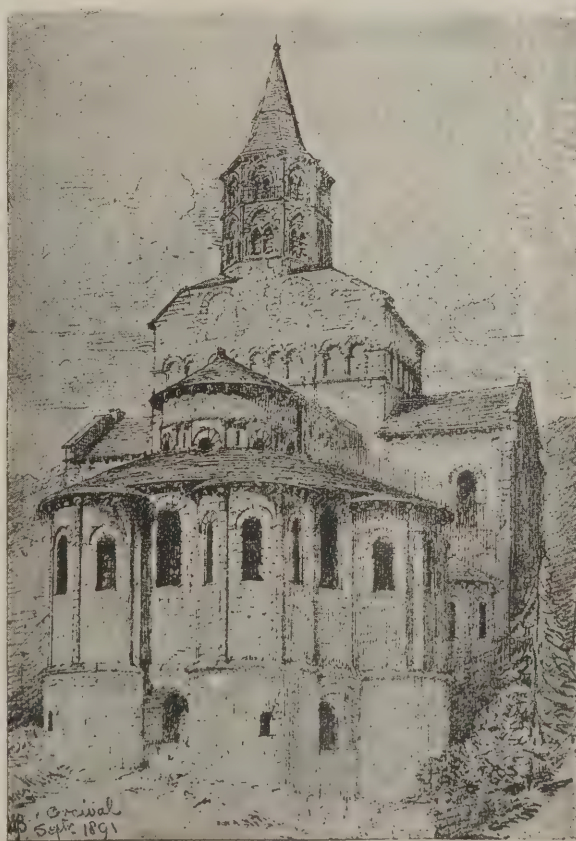
When the time comes, which is happily not for many years, when Sir Arthur Blomfield ceases to take any further active part in the advancement of his art, he will leave behind him a reputation which will be as bright and lasting as any that the century has made.

REPORTS upon the cathedral monuments of Worcester and Lichfield have been drawn up by Mr. Reginald L. Poole, and will be printed in a volume now in preparation by the Historical Manuscripts Commission, which will also contain the Rev. W. D. Macray's reports upon the records of the Corporations of Lincoln and Bury St. Edmunds.

£95,000 is the sum the Town Council of Brighouse want to borrow for sewerage purposes. The Local Government Board have sanctioned the loan.

MR. A. A. STOTT has prepared plans for a new school in High Street, Heckmondwike, to cost £10,000.

At the meeting of the Worcester City Council, it was stated by Mr. Williamson that the total loss on the electric lighting works for the first quarter was less than £100, and he held out strong hopes that by next winter the scheme would be bringing in a profit. He further stated that the builder's extras in the erection of the generating station amounted to between £4,000 and £5,000. The Committee regarded that as very unsatisfactory, and they proposed to enquire into the matter exhaustively, and see what extra work had been done and by whose authority.



NOTRE DAME D'ORIVAL, FRANCE, 1891.

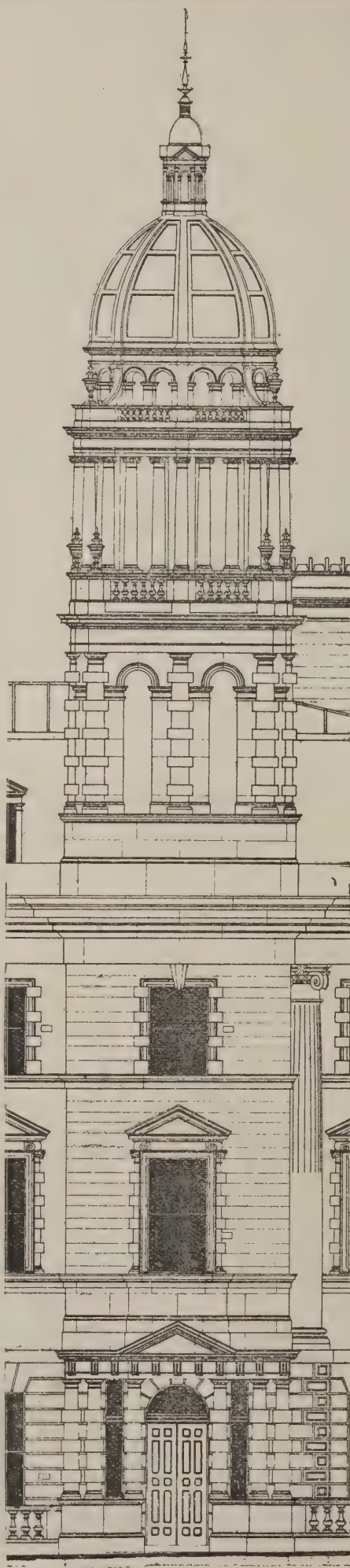
TERRA COTTA.

AMONGST many architects, terra cotta usually suggests a cheap substitute for stone. Designs are frequently made in which cornices, window dressings and other moulded features are intended to be of stone, but can be executed in terra cotta, should their cost in the former material prove too high. Driven by necessity to the use of terra cotta, many have continued to employ it from choice. Its enthusiastic admirers can boast that it is a more honest as well as a more durable substitute for stone than the once popular stucco.

As regards its durability, many architects and builders can refer to examples discovered amongst ruins of stone architecture, where the latter has shown marked signs of decay, while the terra cotta, although less perfectly fired than that of modern manufacture, has preserved its original forms unaffected by the destructive influence of centuries. Upon the question of economy, when it is pointed out that plain ashlar facing in Portland stone costs in London about three times as much as similar work executed with terra cotta bricks, what can the advocates of stone urge in reply? Of course, when we come to ornamental work, the difference in favour of terra cotta is still more striking, while its admirers may be heard to ask, "Where is the carving that can excel good terra cotta ornament in grace and truthfulness of outline?" With reference to internal work, such persons can apparently present a very strong case for their favourite material. "See," they may remark, "how readily it is applicable as a protective and decorative casing to iron construction! There is nothing false about it; nobody is led to believe that it is solid. It is open to treatment with colour in a variety of ways. Colours may be embodied in the material itself by admixture with the clay, previous to moulding and firing; or coloured glazes may be applied to the surface of pale terra cotta; or again, to stray a little from the subject of terra cotta proper, the material can be coated with opaque coloured slips, as in Della Robbia ware and similar products. But why not apply decorative pigments to the surface of ordinary terra cotta, as the Greeks did? Clearly this material awaits extended use in many ways, not least as a fireproof substitute for plaster."

Objections can be urged against any material, and it is not difficult to imagine what can be said by those who have encountered disappointments in their experience of terra cotta. "Not to mention occasional discolouration," they will tell us, "the danger of distortion through unequal shrinkage in firing forms a standing objection to the use of terra cotta for moulded work. Cornices and strings cannot be worked with the same precision as in stone. If the blocks are slightly—ever so slightly—warped in the process of firing, we find that long lines of mouldings, instead of being straight, present a wavy appearance, while curved surfaces meet unevenly where jointed. To correct slight irregularities with the chisel is a laborious process, not always satisfactory in its results; moreover, it removes the 'skin' from the surface of the ware, greatly impairing its much-boasted durability. The danger of distortion is greater in proportion to the size of the blocks, and joints are especially unsightly where figure subjects are introduced. All things considered, we cannot regard terra cotta as a perfect substitute for stone. The combination of colouring matter with the clay may be effected with success, but is often doubtful in its results, and glazed ware is expensive, besides which, sharp angles cannot be satisfactorily executed in it."

It may be said of any material that they



PORTION OF NORTH ELEVATION, NEW ADMIRALTY OFFICES.

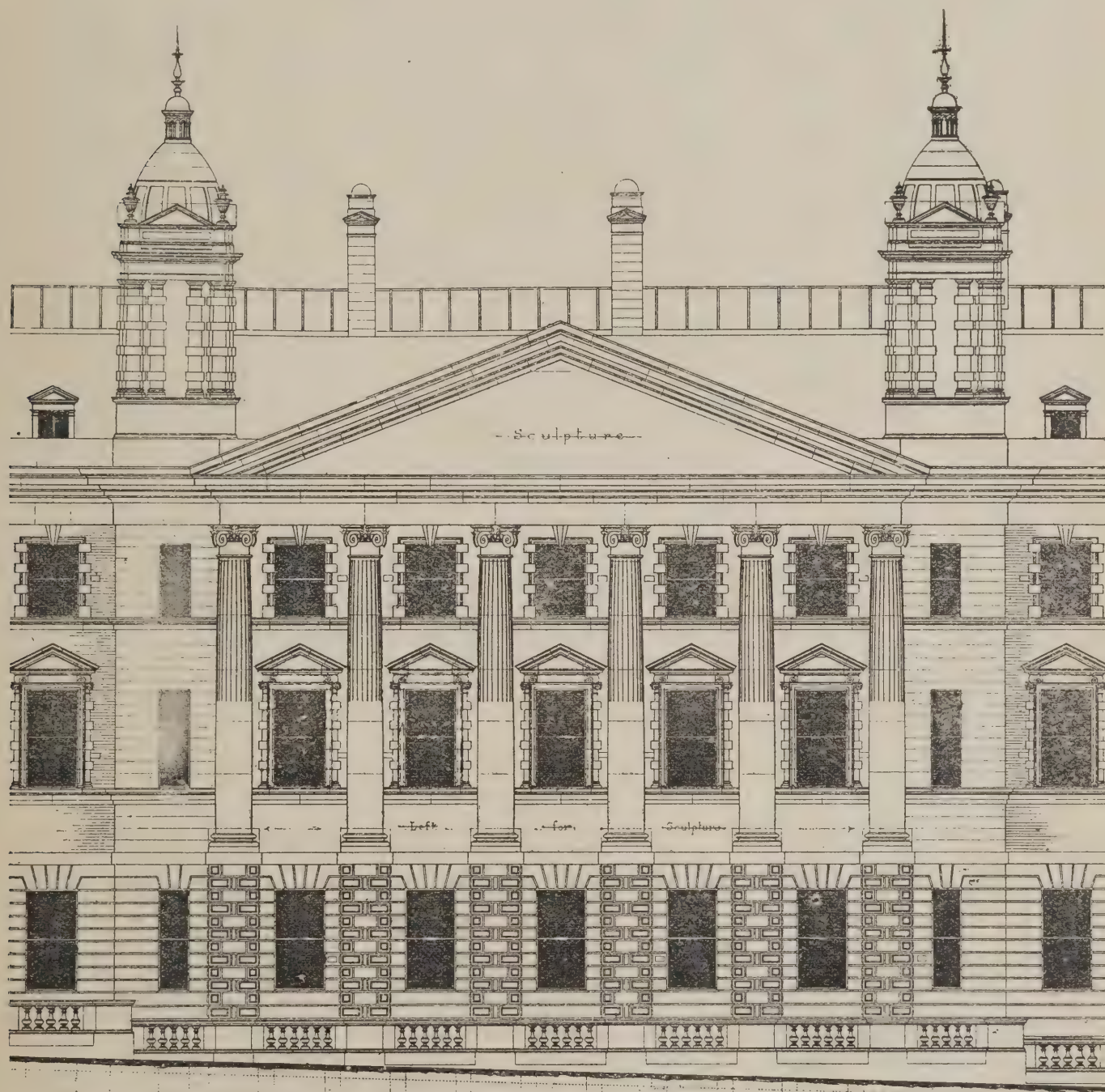
are best qualified to use it who take full cognisance of the difficulties attending its use. Such objections as can be stated against terra cotta should serve to guide us in the employment of it to the best advantage. Can we reasonably expect it to supply the place of stone? and if not, is it not applicable to many purposes for which stone is unsuited? Is it not a necessary condition in good architecture that every material should have its own distinctive treatment? Instead of making designs which can be executed either in stone or terra cotta, according to the amount of money available, would it not be more artistic to make alternative designs in which full justice could be done to the capabilities of each material in turn? All these are questions that will naturally suggest themselves to the mind of a thoughtful architect, who, in seeking to solve them, will probably avail himself of such practical advice as experienced manufacturers can offer. It will be his aim, not only to contrive suitable details for the buildings which grow into being under his eye, but also to add his individual contributions to the progressive development of the various handicrafts enlisted in the service of his art. He will naturally seek to show the capabilities of every material to the best advantage, while making all subservient to the main purposes of his design. To devise suitable methods of treatment for any material, is virtually to invent a style which will be characteristic of it. Recognising such difficulties as a tend the architectural use of terra cotta, we are naturally led to devise forms for it which could not be produced with equal success in stone. If it be found that terra cotta cornices show less advantageously in continuous straight lines, it is at the same time evident that we can have a freer hand with it in curvilinear forms than with stone, because we need not confine those forms within the dimensions of rectangular blocks; there is no cutting to waste. If, in the case of continuous ornamental terra cotta friezes, the joints are thought to be too conspicuous, it may be well to form divisions in the ornament at intervals where the joints occur. It is so easy to arrange for joints only in the most convenient places, when the material we are dealing with can be moulded into any form. This seems to be forgotten by many who persist in designing terra cotta ornament with masons' joints in it. In many instances the structural lines can be made to follow the outlines of ornamental detail in ways that are impracticable in stone, and joggled and keyed joints can be worked in without detriment to the general effect. Mouldings can be mitre-jointed, and rebates and tenons can readily be made available. Structural and decorative suggestions can be borrowed in turn from the mason, the joiner, the wood carver, and the metal-founder, to be applied with judgment by those who are qualified to labour in the formation of a terra cotta style. It need not be imagined that the past has exhausted the capabilities of this material. Hints have been borrowed from the terra cotta remains of Greece, Etruria, Rome, Pompeii, and mediæval Italy; but still there is almost unlimited scope for further artistic developments. The art of combining terra cotta suitably with other materials invites more attention than it has yet received. There is a wide field for the employment of open traceried work, especially in interiors, where it will show to advantage upon a background of darker material. Amid the restless striving after novelty which is so characteristic of this age, there are signs that terra cotta will hold a far more important place in the architecture of the future than it has hitherto, and that it awaits developments and combinations both in form and colour which are already presaged in some of the works of our foremost architects.

THE ADMIRALTY OFFICES.

THOSE who can call to mind the exciting competition, of ten or twelve years ago, for the "Admiralty and War Offices," when a couple of unknown young men carried off the palm with a set of marvellously executed drawings, disclosing capabilities of planning no less astonishing, will, when they see the first outcome of the amended scheme, now fast nearing absolute completion, regret that Messrs. Leeming and Leeming, the young men in question, were

designs submitted in the Admiralty and War Offices' competition of so many years ago. We remember it was our opinion at the time that no one design transcended so much above all others that it could with justice to the scheme be immediately selected, and until competitions for great national buildings are conducted in a different method than they are at present, it should not be impossible to justify the blending of different men's ideas into a perfect whole. A little co-operation in such matters would be wholesome and satisfactory, and the fact that a couple of

sed the original design has just been finished by Messrs. Leeming, at a cost of £150,000—£23,000 of which went for foundations. The builders seem to have gone down 30 feet for the London clay upon which they laid a 6 feet bed of concrete, and surrounded it with a wall of concrete, which formed a hollow basin 300 feet long and 106 feet wide, upon which the new building stands. It rises to six stories in height, is constructed of steel framing cased externally in red brick and Portland stone, very much "amended" in detail from the original drawings of the archi-



PRINCIPAL FACADE OF THE NEW ADMIRALTY OFFICES

LEEMING & LEEMING, ARCHITECTS.

not permitted to carry out their first conception. All the best architectural schemes in this country seem never to get beyond a preliminary stage. Any amount of fuss and bluster is given off at the beginning, and when the finest architectural talent has been devoted to the preparation of a large number of beautiful drawings—carefully considered plans and elevations, amendments of all kinds drop down from the skies, and a very undignified fizzle is the result. We do not wish to re-open the merits of the various sets of

country architects, whose fame had hitherto been bounded by the extent of their parish, were able to beat the highest practitioners of the country in a national building to cost close upon a million of money, goes very very far to prove it. However, having been selected by a competent board of assessors as the authors of the best scheme, we confess we regret that the scheme was not proceeded with. The site on the Horse Guards' Parade cost the Government just half a million, and upon it the first pile of patchwork which super-

sects. All the working rooms, of which there are 120, have windows in the front elevations, the corridors surrounding open courtyards across which the lavatories are built. Open fire places are in all the rooms, and in summer the heated brows of the Government officials will be cooled by breezes wafting over refrigerating apparatus. But, beyond this, there is nothing approaching to extravagance, either in the construction or fittings, and the *Daily News*, which, we presume, knows more about the aims of the present Government than we

do, says, "There is no sort of show place anywhere about it. There are on the first floor a number of reception-rooms, and on this same floor, and on the same side of the building, that looking across the park, are the rooms allotted to the naval lords. The first lord's apartment overlooks the Horse Guards' Parade." It was at one time determined to take one of the best rooms on the park side as the Admiralty board-room, instead of the one in which the affairs of the British navy have been discussed and controlled ever since the Admiralty was built. This old board-room is a fine and interesting chamber, and it has direct association with all the most momentous and thrilling events of our modern naval history. A very natural sentiment appears to have prevailed against any change, and it now seems to be settled that the Admiralty Board shall meet round the old table in the old room. But, for for how long! When the north block of buildings is completed, and it is to be proceeded with at once, and the columnar screen erected along the south front of the site, to connect the old buildings with the new, it will inevitably be discovered that Ripley's building, erected a century and a half ago, is no longer a fit adjunct to the naval administration of Great Britain, and the inevitable will again happen—it will be pulled down, and the site treated as best it can be. The opportunity of treating it as a whole will be gone, and the patch-work will have cost the country a quarter of a million more than the original scheme.

ON OBSERVATION.*

BY LEONARD STOKES, F.R.I.B.A.

OBSERVATION has been defined as "the act of fixing the mind or attention on anything." Now, as so much of a young architect's work and career depends how, upon what and to what extent he fixes his mind, or attention, upon such a variety of "anythings," that I thought, when asked by your secretary to read a Paper before your society, I might perhaps do a good deal worse than give you a few of my notions on this subject, though at first sight it may not seem a very attractive one. As, however, I was born no very great distance from the spot where I now stand, I can at any rate crave your indulgence, and I know that no Lancashire lad has ever yet appealed in vain to his fellow countrymen.

To begin with, I propose to confine my observations to-night to such subjects as are more immediately connected with and interesting to the young architect—though some of my remarks may, of course, reflect to the credit, or otherwise, of our seniors. This I cannot, of course, help, as, if we are to learn anything at all by observation, it is to our seniors, be they alive or be they dead, that we must look for much of the material for our object lesson.

Before going further, however, let me ask you to take my Paper in the perfectly open and friendly spirit in which it is written, and if from time to time any of my observations should appear to you unfair or perhaps untrue in any way, make no observation at the time, but correct me in the discussion which I hope will follow. On the last occasion on which I was honoured with a request to read a Paper before an architectural society, I had the misfortune to be provided with a subject upon which I felt somewhat strongly. The result was that I spoke accordingly—too much so I fear—and hurt the feelings of some of those present. Now, I only tell you this because, instead of correcting me, these gentlemen upon whose corns I had trodden simply abused me, and made

assertions which were loud enough to convince anyone had they but contained a little more argument, and a little less bitterness against the unfortunate reader of the Paper, who was only stating what he thought to be true and what he was perfectly prepared to be corrected in.

To return to our subject, which I shall divide as far as may be under three heads, I fear, however, such division is hardly workable, yet trust it may to some extent make my remarks less disjointed and more intelligible than they otherwise would be, though, of course, in the nature of things they are likely to have some dislocation and but little intelligence. The three heads under which I shall divide my observations or observation as connected with the young architects are then—1st, his Training; 2nd, his Clients; and 3rd, his Work.

Firstly, then, an architect must be trained; but, stop, I have not yet said that you can train an architect, if you note the difference—you may train your draughtsman and your specification writer, you may train your excavator and scientific drainer, your bricklayer, your mason, your tiler or slater, your carpenter, joiner, ironmonger, smith and founder, your plasterer, plumber, glazier and painter, together with your hot water engineer, ventilator and electric lighter, but even then you have not touched your architect, although you may have done a very praiseworthy act, and grounded your man in many subjects which he cannot do without if he is ever to become an architect, but nevertheless you have not yet trained your architect. And now mark me, how are you to train him? Very simply. Develop his power of observation—if you can.

And here I might end my paper and save myself much anxiety and you much wearisome listening, and we might all go home the happier, did I but feel sure that I had made my meaning clear, and that you had really grasped the situation. Fearing, however, that this may not be the case, I must perforce proceed, and give reasons for my statement, and tangle its simplicity with theory and opinion.

Having just told you that observation is everything to an architect, let me involve myself at once by again sub-dividing my subject into our own observations and the observations of others. In some cases we may content ourselves with the use of the latter, but in most cases we shall do well to make our own, as *Rules* in architecture, in my humble opinion, do not exist; therefore, as a mass of exceptions, each case must be treated on its own merits, observation—the eighth lamp of architecture—saving where following so-called rules, precedents and formulæ, would inevitably plunge us into soulless mediocrity; and, believe me, few things can be worse than that. Greek temples and the ever present "orders," have all been reduced to such simple rules, that anyone may learn—yes, and learn with ease—how many diameters a column should be high, and how many minutes make this look well, and how many modules the other should be in order to be perfect, but with all these simple rules, where are your buildings that justify their existence? Echo answers, Where, indeed?

I would as soon believe that no man could be an architect unless he had five letters after his name, as I would that no column could look well unless it was so stipulated number of diameters high. Rules are all very well if taken with many grains of salt; but then, of course, they cease to be rules and become mere guiding principles and not hard and fast rules. The only rule that I know of which is any use whatever to an Architect is his 2-foot one, and that he should never be without, be he young or old, and he may apply it with advantage to almost any building throughout the universe.

Having swept away all rules except our 2-foot friend, what is a young man to fall back upon you will ask me? His eyes, say I. They will teach him proportion better than a book of rules; they will teach him balance, dignity, reserve, refinement, amiability and fifty other things an Architect should know. At least, if they will not, I venture to state that all the rules that ever were invented will not help him one iota. A man should feel these things. He cannot learn them from rules, but he may imbibe them by observation.

Now, curiously enough, our English system

of apprenticeship is based almost entirely upon this system of observation. The young man observes how the old man does it—somewhat in the same way, it is true, as a conjurer may be observed to bring two live rabbits and a bunch of flowers out of an empty hat, placed on a small three-legged table right under our very noses. Well, as there are smart conjurers and clumsy conjurers, so there are good architects and slovenly ones. In each case their tricks—for they are really little else—can be acquired by some of us, but I regret to say that the tricks of the clumsy are more easily observed, and therefore acquired, than those of the smart and good.

The pupil in a moderately good office undoubtedly enjoys many advantages, but if he only observes the rules of the office and does what he is told, he will not get very far I fear. No, he must not only observe for himself how certain problems are overcome on paper, but he must also observe for himself the effect and result in actual work. He might observe, for one thing, how a mistake made on paper—perhaps by himself—may involve the modification of a whole feature, or even the whole end or side of a building, when it comes to be put up. He may observe how a carelessly made and unworkable section—when reduced to bricks and mortar—produces unthought of difficulties, such as want of head room on your stairs, or such-like trifles; how foremen will always follow the *wrong* drawing if two don't happen to agree, and how easy it is for him to go wrong if there is any ambiguity in them at all. These observations will, I hope, teach him the desirability of making drawings accurate; for unless a drawing is accurate, it is very little use at all, unless it is to show to a client to whom correct or incorrect it is, in 99 cases out of 100, simply so much Greek. Showy drawings are, no doubt, a kind of credit to the office, and it is always a pleasure to look at a drawing that has some style about it, but after all, drawings are only a means to an end, and that end should always be kept well in view. If you want to win a competition, make your drawings as showy and as inaccurate as you like, but if you wish to get your building put up as you want it, then let your drawings be as numerous as possible and absolutely correct; of course, if you can make them look well into the bargain, so much the better.

Now the advantage the pupil has is that he sees so many things going on around him, and if he is worth his salt, he will take advantage of this, and the observations he should make at this period of his career will be of the greatest use to him in after life. He can, you see, train his eye on the works of his master. I don't mean that his master will let him design or alter anything much, but what the pupil must do is to observe how the design looks on paper, and form his own opinion as to what it will look like in execution (this he had better, perhaps, keep to himself), and when he sees the work in reality, he must note how far his judgment has been right, or how far he has been led to misjudge the whole by not being able to see it in his mind's eye whilst looking at the drawing only. Situation, too, may have something to do with it, and what he thought would look heavy or clumsy on paper, may look just the reverse when put in position and seen in conjunction with its surroundings—and this question of surroundings should have a great deal to do with the question of design, although I fear that enough attention is not always paid to it.

Another form of observation, which cannot well be over-estimated, is sketching and measuring existing work. You see what we have to do now-a-days is to make paper designs, which, when executed by the builder, will firstly, answer the purpose for which they are intended, and secondly, satisfy the eye. Now, a young man wanting to learn how to do this has to work backwards, so to speak. He must first find his ideal building, and then set to work to reduce it to paper; and, having done so, he should be able to look at his drawings and see the building standing out in all its balance, dignity and beauty. The more careful the study the greater the reward; and, after a time, he will be able to think on paper to any given scale, and these thoughts, when handed over to the builder, can be worked out so as to produce just the effect desired.

* A paper read before the Liverpool Architectural Society, on Monday, February 11th.

We publish this article as we receive it from Mr. Stokes, and by an act of courtesy on the part of the North Western Railway Co. are able to get his corrections before going to press. Although the whole gist of the paper could have been contained in a column of good literature, Mr. Stokes has been compelled to "fatten" it and thereby sacrifice half its power. Without in any degree accepting many of his strictures we shall reserve our criticism upon it until next week.—Ed.

The eye, too, should be trained to see things in perspective, even though they are only drawn in elevation and, if the eye cannot at first be brought to do this, the hand may be sworn in for the habit of thinking, sketching and seeing things in perspective, will be found of the greatest use in designing. Far too much work is thought out, only on the flat, and hence, when executed, is unsatisfactory; observation is the never failing remedy, and it is surprising how, after a little of it, your brain and eye become most obedient and expert, and you can either think or see round corners with the greatest ease.

Besides the study of what is generally called *old work*, the study of contemporary work should follow, hand in hand. Observe again, how our best men get their best effects, and observe also where they fail; for, perhaps, one of the greatest uses of observation lies in its teaching us what to avoid. Books, too, may be of great use to us if used judiciously, but I am inclined to think they are often very much abused, and many a man's work bears the impress of book knowledge where it should rather give evidence of independent thought and a living treatment. Photo-lithography may be a blessing in some ways, but our streets should not be simply composed—as they too often are—of a collection of the most fashionable plates that have appeared, from time to time, in the Building Journals; adapted it may be, to some extent, to their new requirements, but never looking more than make-believes at the best.

A young architect should, of course, read, and there are some books that he must almost live with, as they will help him to appreciate what is good and noble about his calling, and lift his drooping spirits after a day's specification writing or drain planning. But I cannot help feeling—take it for what it is worth—that an hour in a fine building will open a man's soul more than a week's reading; and sketching in a museum will do him more real good than all the histories of architecture that were ever written. Do not misunderstand me, pray; I am speaking of the young architect, and of what will help to develop the architect within him; but, of course, the young gentleman—forgive the term—must not be forgotten, and he must acquire many things, such as history and knowledge of the styles, &c., for general purposes, such as passing examinations, and to fit him for committee meetings and architectural societies. But it is a man's soul that has to be developed if we want to make an architect of him; and few book worms have, I think, large souls, their chests are too narrow, and I can hardly fancy a good architect with a narrow chest even, for good work seems to come from the chest and shoulder as much as anywhere; and, if these are bent and hollow, so will the work they produce be weak and lifeless, however full of precedent and learning it may be.

Books and illustrations may remind us of what we have seen, but we must observe and study for ourselves outside all books. Travel, of course, is almost, if not quite, imperative, for however fine a town may be—and Liverpool undoubtedly is a fine town—a man's soul has not room to expand even in Liverpool, although I can think of few things more likely to inspire one with fine ideas than a blow on our noble river—it is so large, so free, so bold, that when in doubt, I should certainly take it into my confidence were I a resident instead of an absentee. But even the Mersey, with all its grandeur, will only, so to speak, stir up our ideas and bring them to the surface. We must have saturated ourselves previously with the spirit of fine work, and absorbed the ideas of others, not as so many items or specimens to be palmed off from time to time as our own, but as the very food and drink—intoxicating drink even if you will—of our very existence. Observant travel is then a necessity, and every young man should make a point of seeing as much of the world as possible, as travel opens the mind and gets rid of the cobwebs that will collect about the brain of the stay-at-home.

Friends, too, and instructors are most useful to an architect, as they will often direct his observation into paths and byways that might otherwise escape his notice. Your new Professor and my old friend, Mr. Simpson, will be able to help you very much in this way. If you will go to him open-minded and unreservedly, I

know from experience that you will not come away empty-handed or unrewarded.

One point upon which I should like to insist in the training of an architect is, that he should mix freely with painters, sculptors, and other students of the Fine Arts. I don't know what possibilities of this sort you may have in your Liverpool schools and societies, but whatever chances you may have, I say make the most of them. In London we have the Royal Academy Schools, where architects, painters, and sculptors are all taught under the same roof, and there I know from experience much good is done from the fact of the students simply meeting on common ground with one common interest. Friendships are made, ideas interchanged, the mind enlarged, and observation brought to bear on fresh fields of interest. Sculptors that are at a loss when using a simple moulding, painters who cannot even draw a door step in perspective, and architects who have very little knowledge of either form or colour, are far too common amongst us. Life is, I fear, too short for each of us to receive a distinct grounding in the calling of his neighbour, but if students whose aims are not dissimilar are brought up together, they will at any rate rub the angles off each other, and quickly learn what to appreciate and what to avoid when brought in contact with work, which strictly speaking, may be outside their province. Bring up a child with a French nurse and a German governess and it will pick up a certain amount of French and German while it is being taught English. The same thing applies to an architect brought up with painters and sculptors, for he will learn enough of their language to help very materially in forming his tastes and training his judgment in all things relating to fine form and good colour.

We also have a society in London called the Artworkers' Guild, and it is formed of members of all callings into which any form of artistic work is introduced. We have fortnightly meetings, when short papers are read and discussions take place perhaps upon some subject relating to the calling of one group of members, or, may be, of some subject of interest to all. In either case the great gain to members is that they hear the views of a number of men who approach the subject from various standpoints. If you can only extend the scope of this society, and induce a number of men to join you who are practically connected with the design and production of good modern work of any kind, you will, I think, derive much benefit yourselves, and you may also help to improve those who join you, not a little.

I had rather have said nothing—if I had consulted my own feelings—upon the much debated and discussed subject of examinations, but I feel that to pass it over without a word would be, perhaps, cowardly on my part, as I have observed that the Institute examinations have taken a deep hold of the Provincial—or shall I say non-Metropolitan—architect, and particularly so in Liverpool. Now I am not going to abuse these examinations, neither am I prepared to say that I approve of them, as I look upon them as, to a certain extent, unimportant. There is, however, a kind of Examination Party at the Institute, which is trying to force and artificially foster these examinations in every possible way, to the detriment of every other project, and that I do object to as a member of the Institute; but I fear this is of no interest to you. However, it may interest you to observe for yourselves who this Examination Party consists of. Does it consist of those architects whose work you admire? Does it consist of those men to whom you would most naturally look if in doubt on a work of any magnitude or beauty? You must answer these questions for yourselves, but at the same time you must allow me to state that in my opinion it, to a very large extent, does not, and the unfortunate part about it is that these gentlemen get returned to power to a large extent by the country members on this very examination question, and when in power the whole policy of the Institute becomes "light and airy" in consequence. For you see the majority of these examination men not being architects of any very great capability, the aims and objects of the Institute are affected accordingly.

And why do the real Architects either give only a half-hearted support to, hold aloof from,

or abuse this examination movement? Because they know by observation that, although you can test your Mason, Bricklayer, Carpenter, Joiner and Sanitary Engineer, yet your Architect you cannot hope to test with any satisfactory results, therefore it is futile to try. Of course, it may be argued that it is at any rate a good thing to have good Masons, Bricklayers, Carpenters, Joiners and Sanitary Engineers in the Institute instead of bad ones. We will admit that, but unfortunately, these examinations are called Examinations in Architecture, and an effort is made to include Art (with a capital A) in the syllabus. Now I think we have come to the conclusion—at least I have—that Architecture, as apart from the knowledge of building operations, cannot be tested, at any rate by human beings. But let them try; at worst they can but damage the career of a few young men—and the craze will pass away with those who are the present heads of the movement. On the other hand, if these examinations are any incentive to honest work, and will inspire any one with a love for his calling for its own sake, and not simply with a craving for those ungainly and absolutely useless letters after his name, then, I contend, the movement will have done good, but not otherwise. Therefore, I say, observe this movement, and observe the movers in it likewise; observe those who advocate other principles, and do not be driven into either camp by catch words, empty promises, or meaningless derision; for knowing all the subjects covered by the Institute Examination won't make an Architect of you, yet, to be one, you should know something of most of them.

(To be concluded.)

MR. SILVANUS TREVAIL, the Mayor of Truro, a well known architect, was presented with a handsome testimonial at the Truro Town Hall on the 4th inst., by the Rt. Hon. the Earl of Mount Edgumbe, on behalf of numerous subscribers, in recognition of his valuable services in the matter of the railway development of Cornwall. The gift consisted of a handsome silver service of plate in the Queen Anne style and a cheque for 100 guineas.

MESSRS. J. AND H. NEVILL have recently erected a new Turkish bath in the City, which was opened by Alderman Treloar on Tuesday last. The design is by Mr. G. Harold Elphick, architect, and the style is Moresque.

THE Glasgow Institute of the Fine Arts held its annual meeting on Saturday last. Lord Provost Bell was elected president; Mr. J. G. A. Baird, M.P., and Sir John Stirling Maxwell, vice-presidents; Mr. A. J. Kirkpatrick, chairman of council; Mr. Patrick S. Dunn, hon. treasurer; and Mr. David Tullis, hon. secretary.

THE London County Council have rejected the recommendation of the Improvements Committee to construct a roadway from the Tower Bridge and Whitechapel.

THE mansion built for Mr. Cornelius Van derbilt has just been completed at a cost of something like £1,000,000. The outside design is Spanish, built of grey stone, with red facings, turrets and battlements. It has three storeys, and contains, among other attractive rooms, a ball-room, no less than 75 feet long by 50 feet wide, the ceiling of which is made in the form of a double cone with painted nymphs and cupids. Electric light is used throughout.

MR. ABRAHAM MOSLEY, of Northampton, has been appointed surveyor to the Finedon Urban District Council.

THE new Board Schools at Carville, Wallsend, are now open. They have been built on the Central Hall arrangement, from designs by Mr. Wm. Hope, of Newcastle and Shields, the main apartment being 61 ft. long by 22 ft. wide, flanked by six classrooms—three on each side—each capable of seating sixty senior scholars.

THE Rev. Canon Penrhyn opened the new elementary schools at Blockbrook, near St. Helen's, on Friday. The buildings provide accommodation for 350 scholars. The plans were prepared by Mr. Thomas Robinson, of Haydock, and the contract for the erection of the schools was taken by Mr. Peter Tickle, St. Helen's. The total cost has been £1,350.

FROM WATERLOO TO THE CITY.

THE work of constructing the underground Electric Railway between Waterloo and the Mansion House shows signs of active progress. Direct transit, without stoppages, will be effected in about four minutes, at a speed of 22 miles an hour. The departure platform of the Electric Railway being 36 feet from the surface, the use of hydraulic lifts will be unnecessary, but they will be employed at the Mansion House Terminus, where the rails will be 65 feet below the level of the thoroughfare. At Waterloo travellers will reach the lower station by easy declines. The railway commences at Waterloo at a level of 36 feet below the South Western Railway, and then descends towards the river at a gradient of 1 in 60. Passing under the river, the line is level for about 300 yards, and it then rises at 1 in 88 towards the City, and terminates opposite the civic residence of the Lord Mayor. The tops of the two tunnels will be at a depth of about 24 feet below the bed of the Thames; or, to put it another way, the rail level will be 62 feet below Trinity high water mark. At Cross Street, where the railway passes underneath the South Eastern viaduct, the depth will be 48 feet; at the junction of Waterloo Road and Stamford Street 38 feet; and at Hatfield Street, in the bend of Stamford Street, 55 feet. After passing below the river, the next important crossing is the Victoria Embankment, in front of the City of London School, where the rail level will be some 78 feet below the surface of the footway. The line goes down below the District Railway a few yards further on. At St. Andrew's Hill the District and the Electric follow the same route so accurately that the centre line of the one will be the centre line of the other until Friday Street is reached. Here they part company, the Electric going straight along under the centre of Queen Victoria Street, terminating opposite the north western corner of the Mansion House. From the indication of the gradients; it will be seen that the railway rises and falls somewhat after the manner of a "switchback."

The total length of the line will be one mile and a half. The traffic will be conducted by an up and a down line, each occupying a separate tunnel, cast-iron, running parallel to one another at a distance of about four feet. Where the railway is straight, or on a flat curve, the internal diameter of the tunnels will be 12 feet, but where the curves are sharp the tunnels will be enlarged in diameter to 12 feet 9 inches, so as to prevent the possibility of the long "bogie" carriages, which are to be used, fouling the sides. Beyond the fact that electricity is to be the motive power the details are not yet settled, but the opening of the railway may be anticipated in about two and a half years hence.

The station in the City will be entirely underground, and passengers will be brought to the surface in capacious hydraulic lifts. The station tunnels, like the railway, will be of cast-iron, built on Greathead's principle, but of large dimensions, namely, 23 feet internal diameter. From near Hatfield Street, towards the City, both tunnels will be in the London clay, but from Hatfield Street towards Waterloo, as the line rises in that direction, it encounters ballast. Here water will be met with in large volumes, so it will be necessary to construct this portion of the railway under compressed air, as was done in the City and South London Railway by Mr. Greathead, and is now being done in the construction of the Blackwall Tunnel by the London County Council. The object of commencing work by sinking shafts in the river, is to enable the material to be brought up by cranes and at once deposited in barges. Messrs. Galbraith and Greathead are the engineers; Mr. Dalrymple Hay being their engineer on the works, and Messrs. John

Mowlem have the contract. Immediately after the letting of the contract in June, they began operations by constructing the stage near Blackfriars Bridge. Here two cast-iron cylindrical shafts have been sunk to a depth of 40 feet below Trinity high water mark, one above each of the proposed tunnels. Below the cylinders the shafts are of brickwork in cement, and as soon as the depth of the floors of the intended tunnels attained the four protecting shields and the mechanical excavators will be lowered into position, and the driving of the tunnels carried on simultaneously in both directions. As soon as the first ring of the culvert is put together, a shield is put in the front: through a door in it the face of the heading is accessible to the miner, who picks out the central core of the rock. The shield has a projecting edge all round its periphery, which, as the shield is pushed forward by the hydraulic presses, cuts a circular sufficiently large for putting the iron segments together to the proper dimensions of the culvert. Wedges being inserted in the rock face between the periphery of the shield and the central core cavity, the intervening rock is broken into fragments and falls down between the shield and the face of the heading, being shovelled up thence and sent away to the rear in skips. Thus the progress will be made, ring by ring, one at a time, each ring advancing the tunnel by two feet.

SOCIETY MEETINGS.

The Institution of Mechanical Engineers.—The forty-eighth annual general meeting of the Institution was held in the rooms of this Institution in Great George Street, and was largely attended. Professor Alexander B. W. Kennedy, having been re-elected president, took the chair, and moved the adoption of the Council's report for the past year. The report stated that at the end of last year the number of names in all classes on the roll of the Institution was 2,221, as compared with 2,157 at the end of the previous year. During 1894 there were added to the register 152 names, against which the loss by decrease was 31, and by resignation or removal 57. The financial receipts during the past year had been £7,081, while the expenditure, actual or estimated, was £5,292. The capital of the Institution amounted to £38,535, the greater part of which was invested in railway debenture stocks. Experiments upon the use of ropes and belts for the transmission of power, announced a year ago as about to be undertaken by the Société Industrielle du Nord, at Lille, had since been carried out, and Professor Capper, who attended them on behalf of the Institution would make an independent report upon them in due course. In reply to a member the President stated that a committee had been appointed to consider the question of applying a portion of the funds of the Institution to securing a place of assembly of its own in London.

Plymouth School of Art.—In continuation of the series of lectures on "Architectural History," before the junior members of the Architectural profession of the Three Towns, at the Plymouth School of Art, Princess Square, Mr. B. Priestley Shires, A.R.I.B.A., delivered the eleventh lecture on the 31st ult. In his opening remarks Mr. Shires mentioned the causes which led to the development of the Romanesque styles in the tenth century, and said in the eleventh century each country struck out a style of its own, Germany retaining more of the older characteristics than either France or England. As long as the unbroken horizontal lines continued in use, so long may English-Norman work or the Anglo-Romanesque style of architecture be classed as purely Romanesque; but when vertical shafts were introduced running up in front of the piers in ecclesiastical buildings, and dividing the triforium and clearstory into compartments, then the first principle of Gothic architecture began to manifest itself, and, coupled with the use of the pointed arch, many new features were developed. Without going into any of the many theories as to the origin of the

pointed arch, Mr. Shires thought it was by far the best plan to consider the pointed arch in the same light as nearly all other architectural features, as a development. The Gothic period practically began with the thirteenth century and closed with the fifteenth century, as far as good Gothic architecture is concerned. The term Gothic was first used more as a term of reproach than for any other reason, and intended to distinguish those buildings which were considered barbarous in style, that is, those which were not classic. During those centuries it prevailed more or less throughout the western, middle, and southern parts of Europe, and though there are some variations in the buildings of the different nations who adopted it, still, as a whole, they are practically one style.

Manchester Society of Architects.—

On the 5th instant Mr. J. D. Sutcliffe delivered a lecture on "Combined Warming and Ventilating," before the Manchester Society of Architects. The lecturer contended that the warming effect of an open fire upon a room is not obtained direct from the rays of heat, but from their reflection from the various material objects into which they come into contact, otherwise that the sole effect of the fire is to draw cold air into the room, especially along the floor. Much more warmth was derived by direct radiation from common stones, pipes and coils, but in all of these cases there was no ventilation, the same air being breathed and warmed over and over again. Indirect radiation he described as obtained by the passing of air over heated surfaces, and thence into the room, always securing some ventilation as well as warmth. This combined warming and ventilation when provision is made for supplying fresh air and simultaneously discharging vitiated air. He instanced the American system of Messrs. Smead. According to the lecturer, that system does not admit of proper provision for filtering the air where the conditions of the atmosphere render that necessary. The Plenum system, he said, is the best for large buildings, and is always associated with mechanical force, and admits of any filtering arrangements. A fan draws in external air through a filter, and at the same time propels it through heating apparatus, whence the filtered and warmed air is driven into main and branch ducts that terminate in the rooms to be warmed. Entering above the heads of the occupants, the warm air necessarily rises at once to the ceiling, where it spreads, cools, and consequently descends, eventually passing out at the floor level by exit-ducts there provided. Dusty and other vitiated air is thus prevented from rising, and the weight of the respired carbonic acid gas accompanies and aids the descent. Experience proves that the warmth so derived is agreeable and equable and the system prevents inward draughts or the entry of any contaminated atmosphere from outside, such entry being often experienced where mechanical force is applied solely for drawing foul air out. The system provides for entirely renewing the air of the room at any desired rate up to ten times an hour. It has been theoretically inferred that air, when treated as described, must be unhealthily dry, but repeated tests prove the presence of ample moisture.

THE Corporation of Aberystwith have inaugurated the installation of the electric light along the marine front and main portion of the town. The Esplanade is lighted by arc lamps of 2,000 candles, placed 45 yards apart, but smaller ones are used in the street thoroughfares.

MR. E. LINGEN BARKER, the architect of Hereford, has just commenced the intermediate schools at Newport, Mon. Messrs. Thomas & Co., of Swansea, are the contractors at £5,500.

OUT of 163 candidates for the post of surveyor to the Brentford local board, Mr. Nowall Parr, from Walsall, has been selected at a salary of £250 and a liberty to act as consulting engineer.

THE City Commissioners of Sewers have just adopted a report recommending that powers be obtained to provide urinals and Washhouses within the City, at a cost, it is suggested, of £100,000. At the same meeting, it was decided to carry out a street improvement in Dean's Court and St. Paul's Churchyard, at a cost of £2,000.

Trade and Commerce.

In these columns nothing but matters of current commercial importance will be treated. New materials will be discussed—not puffed, inventions analysed, and improvements noted. The Editor will gladly receive communications from his correspondents, but it must be clearly understood that in no case will any notice of a new manufacture take the form of an advertisement, either from firms who advertise their goods in "THE BUILDERS' JOURNAL," or from those who do not. Small and plain illustrations detailing the material or manufacture discussed may be sent, and if found suitable, will be inserted.

Messrs. Young & Marten, of Stratford, write; "Herewith we have the pleasure of handing you a copy of our new Chimney Piece, Grate, Tiles, Stove and Kitchen Range Catalogue, bound in stiff cloth, and consisting of 214 pages. Twenty of which are lithographed in colours in highest class of workmanship. This forms Section I. of our complete Catalogue, which, when completed, will consist of at least 600 pages, and will cost something near £4,000 for production. We believe we are correct in saying that it is the finest work of its class that has ever been attempted as a Trade Catalogue for the Builder, Plumber, Decorator and Sanitary Engineer. We anticipate it will be ready for issue in its entirety on the 1st June next, and we are prepared to receive names and addresses from your readers for a copy when ready. We may say that the remainder of the work will be carried out on the precise lines as that shewn in the Section now under consideration. We shall esteem it a favour if you will give us an impartial and exhaustive review of the present Section, and refer to the complete work in contemplation." Messrs. Young & Marten claim nothing for their work which we cannot accept. It is, indeed, a most carefully compiled catalogue, and it has the additional virtue—which is somewhat rare—of showing goods, their styles, their characteristics and their prices, clearly and concisely, without wading through intricate indices and references, which bewilder an ordinary individual and very often drive him mad. We have never seen more honest illustrations, which, however, and without a single exception, are drawn in that odd mixture of geometrical and perspective drawing peculiar to illustrated catalogues, and which no manufacturer has yet had the courage to discard. The coloured sheets of tiles for hearths and panels, grates, dados and pavements are really charmingly executed, and the printing of the whole work, and the general "get up" of the catalogue is of a very high order. Messrs. Young & Marten are unduly modest when they dedicate their work to the Builder and the Plumber and the Sanitary Decorator. There are several items, particularly registers with overmantels, from which many architects would learn something of good design.

Laxton's Price Book for 1895 is sent to us by Messrs. Kelly, and, no doubt, is in the hands of thousands of Surveyors, Architects and Contractors, for whose special use the work is compiled. It hardly needs a word of recommendation, except that it is again brought up to date, contains *in extenso* the London Building Act of 1894, and should lie on the shelves of every Architect and Builder who can afford so low a price as four shillings for it.

Lockwood's Builders' Price Book for 1895 has also reached us, and has one distinctive feature, which in this respect makes itself as acceptable as the better known "Laxton." Mr. Francis Miller, the Editor, has continued his short measurement constructions in all trades, which are very useful, as they come from a very practical man. The published price is four shillings. The book is published by Crosby, Lockwood & Son, of Stationers' Hall Court,

Colchester Camp.—The contract of Messrs. Grimwood & Sons, of Sudbury, has been accepted for the re-building of A and B lines in Colchester Camp, and work will probably be commenced in the early spring. The firm has already partly completed the building of the very extensive new Military Hospital, which is being erected on the Abbey Field. As it is understood that the plans of the reconstructed Camp provide for the erection of substantial two-storied brick huts for the men on the principle adopted at Aldershot, and that handsome and substantial officers' quarters will be built facing the Abbey Field, in place of the present unsightly brick wall, the improvement that will be effected in the garrison accommodation will be a very important one.

PRICES CURRENT OF MATERIALS.

(From The Builder).

TIMBER.			TIMBER (continued).		
Greenheart, B.G.	ton	8/0/0	Satin, Porto Rico	0/0/6	0/1/6
Teak, E.I.	load	10/0/0	Walnut, Italian	0/0/3	0/0/7
Sequoia, U.S. ft. cu.		1/10			
Ash, Canada load	3/0/0	4/5/0			
Birch, do.	3/0/0	4/0/0			
Elm, do.	3/15/0	4/0/0			
Fir, Dantsic, &c.	1/10/0	3/0/0			
Oak, do.	2/15/0	4/15/0			
Canada	5/5/0	6/15/0			
Pine, Canada red.	2/15/0	3/5/0			
Do. Yellow	2/10/0	3/15/0			
Lath, Dantsic, fath	4/10/0	5/0/0			
St. Petersburg	5/0/0	6/10/0			
Wainscot, Riga,					
&c., log.	2/15/0	5/0/0			
Odessa, crown	2/15/0	5/0/0			
Deals, Finland					
2nd & 1st std. roo	7/0/0	8/0/0			
Do. 4th & 3rd	7/0/0	8/0/0			
Do. Riga	7/0/0	8/10/0			
St. Petersburg					
1st yellow	9/10/0	12/0/0			
Do. 2nd yellow	7/10/0	9/0/0			
Do. white	8/0/0	10/10/0			
Swedish	7/0/0	15/10/0			
White Sea	6/10/0	14/0/0			
Canada, Pine 1st	2/10/0	24/10/0			
Do. do. 2nd	16/10/0	17/10/0			
Do. do. 3rd, &c.	7/10/0	10/10/0			
Do. Spruce, 1st	8/10/0	10/0/0			
Do. do. 3rd and					
2nd	6/10/0	7/10/0			
New Brunswick	6/0/0	7/0/0			
Battens, all kinds	5/0/0	21/0/0			
Flooring boards,					
sq. 1 in. prep	0/9/0	0/14/0			
Do. 2nd	0/7/0	0/12/6			
Other qualities	0/5/0	0/10/0			
Cedar, Cuba, ft.	/3	/4			
Honduras, &c.	/3	/4			
Mahogany, Cuba	/3	/6			
St. Domingo,					
cargo av.	/3	/16			
Mexican, do. do.	/3	/4			
Tobacco do. do.	/3	/6			
Honduras, do.	/3	/5			
Box, Turkey ton	4/0/0	13/0/0			
Rose, Rio	7/0/0	18/0/0			
Bahia	0/0/0	17/0/0			
Satin, St. Do-					
mingo	0/0/5	0/1/0			

Notes & Queries.

Under this heading, Questions on all matters appertaining to the art or science of Building may be made by subscribers; and their fellow readers are invited, under our own supervision, to furnish replies. Post-cards headed "Notes and Queries" may be used in correspondence and addressed to the Editor.

QUERIES.

[1.]—**Curious Buildings.**—Comment is made in another column on a curiously constructed house in a village of Norfolk, in which the "heads" of leg, loin and "knuckle" bones have been used in cornice and string courses in a stone and flint built front. Will our readers send us particulars and (where possible) photographs of any equally curious instances of construction?—THE EDITOR OF "THE BUILDERS' JOURNAL."

[2.] The passage wall in the basement of my house in Westbourne Park suffers from chronic dampness to a height of about 4 feet from the floor. I have used every contrivance to stop the nuisance, and have dug under the foundations and can find no apparent cause. Matchboarding has bulged and swollen away from the wall. What can, with unbounded patience, be done next?—C. J. COMERFORD.

[3.] I have heard of a book which deals with the work of Wren, and gives most accurate drawings of most of his churches. Mr. Batsford does not know of it. Can any of your readers throw any light upon it, and if there is such a book, say where it can be seen?—ARCHITECT.

[4.] I want to heat a conservatory 14 ft. by 10 ft., using the kitchen fire supplemented by gas—outside the conservatory—during the night, or when the kitchen fire is not in use. What is the best apparatus, and who is the maker of it?—A. T. W.

[5.]—There is a liquid which, used with ordinary thick Indian ink, will not dry up quickly in the palette, or "run" when washed over on a drawing. What is it?—MEMBER OF THE A.A.

N.B.—We have received a number of queries which are quite unsuited to publication, inasmuch as they would probably prove of little interest to anyone but the querist. Correspondents must be as liberal-minded in these matters as we are ourselves.—ED.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

We have received several communications, mostly of a laudatory character, from gentlemen who have seen the Specimen issue of this journal. We are thankful for the good opinions, but are selfish enough not to allow our readers to share our enjoyment.—ED.

SAWDUST.

THE annual dinner of the Society of Architects will be held on Tuesday week, Feb. 19th, at St. James' Hall, Piccadilly, W., at 7.30 p.m. We understand that a number of guests, distinguished in Church and State, Art, Literature and Science, have accepted the Society's invitation to be present.

MR. ARTHUR B. JACKSON, A.R.I.B.A., has been appointed a Surveyor, under the Ecclesiastical Delapidations Act, to the diocese of St. Alban's.

APPLICATION has been made to the Local Government Board, by the Town Council of Darwen, for powers to borrow £6,000 for the purpose of erecting a new Municipal Lodging House in the Borough.

At Colchester, on Sunday morning, Mr. F. Dupont, a well-known local Builder, and Contractor, having premises at North Hill, attempted suicide by cutting his throat with a knife. He had suffered from sleeplessness, and was much depressed. The wound was a serious one, but Mr. Dupont is recovering.

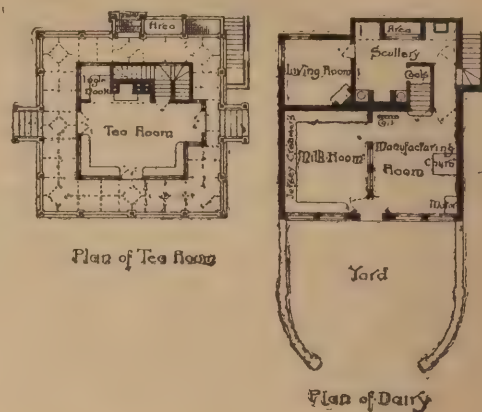
THE County Council discussed, on Tuesday, a scheme submitted by the Improvements Committee for making a better northern approach to the Tower Bridge by a new street from Tower Hill to Mansell Street, part of the large outlay to be recouped by a betterment charge on the owners of property. An amendment to defer taking any action in the matter at present was adopted by a majority of nine. It was agreed to co-operate with the Commissioners of Sewers in the widening of Upper Thames Street at its narrowest point, by contributing one-third of the outlay, such contribution not to exceed £12,500.

A PREMIUM was lately offered for the best plans for a cottage hospital at Aldershot, and 94 sets of plans were sent in. The assessor was Mr. W. D. Caröe, F.R.I.B.A. The successful competitor is Mr. Thomas Davison, A.R.I.B.A., 41, Oakley Crescent, Chelsea. The estimated cost is £2,000.

At a joint conference of the finance committee of the Middlesex County Council and the Highgate justices, held at Northfield Hall, Highgate, it was resolved to recommend to the Council to purchase a large plot of land at the corner of Archway and Church Roads, Highgate, for the erection thereon of new police-court buildings for Highgate and the district. At present the petty sessional sittings are held at Northfield hall, which has been found inconvenient and inadequate in many respects for the purpose.

THE sixth meeting of the Discussion Section of the Architectural Association was held at 56, Great Marlborough Street, on the 6th inst., when Mr. Harry Sirr, A.R.I.B.A., read a paper on "Domestic Metal Work." The paper was illustrated by a fine collection of sketches and metal objects lent by Messrs. Mackmurdo, Hugh Stannus, May, Hooper, Guy Dawber and Millard. In the discussion which followed the paper, Messrs. Greenop, Hopkins, Fellowes-Prynn, Rathbone Garbutt, Guy Dawber, Hooper and W. Henry White, the Chairman, took part.

It is stated that a company has been formed for the purpose of erecting colossal stores in the West-end. The first practical move has been made by the purchase of a plot of land in Westbourne Grove for over £30,000.



THE BLYTHEWOOD DAIRY. By Mr. W. D. CARÖE, M.A., ARCHITECT.

COMPETITIONS.

COUNTY BOROUGH OF WEST HAM.

COMPETITION.

The Council of the County Borough of West Ham propose to ERECT a TECHNICAL INSTITUTE and PUBLIC LIBRARY in Romford Road, and they hereby invite Architects to submit DESIGNS for the same in competition.

Premiums of £250, £150 and £100 respectively will be paid to the Authors of the Designs which are placed by the Assessor first, second, and third in point of merit.

The Competitor to whom the first premium of £250 may be awarded will be employed as Architect, and will be remunerated in accordance with the schedule of professional practice and charges of architects, published by the Royal Institute of British Architects, such remuneration being independent of the premium.

The Council have appointed Mr. J. MACVICAR ANDERSON, F.R.I.B.A., 6, Stratton Street, Westminster, W., as their Assessor and Professional Adviser.

Designs are to be delivered at the Town Hall, West Ham, E., not later than FOUR p.m., on WEDNESDAY, 1st May, 1895.

Full particulars of the instructions and conditions can be obtained on application to the undersigned, on payment of a deposit of One Guinea, which will be returned in the event of the applicant either submitting a Design, or returning the instructions within one month from the date of receiving them.

By order of the Council,

Town Hall, West Ham, FRED. E. HILLEARY,
January 21st, 1895. Town Clerk.

ERDINGTON (near BIRMINGHAM), MARCH 30.

COTTAGE HOMES.

The Guardians of Aston Union invite Competitive Plans, with specifications and estimate, of Cottage Homes to be erected at Erdington, near Birmingham. The Architect who sends in the plans selected as best will be appointed Architect for the erection of the buildings, or be awarded a premium of £70, as the Guardians may decide; and he who sends in the plans selected as second best will be awarded a premium of £30.

A copy of instructions to Competitors and conditions of competition, together with a plan of the site, may be obtained on and after 9th inst. from Mr. JOHN NORTH, Clerk, Union Offices, Vauxhall Road, Birmingham, on payment of £1 1s., which will be returned on the receipt of *bona fide* plans, specifications, and estimate. Plans, &c., must be delivered by March 30.

IPSWICH.—MARCH 23.

DESIGNS are invited for the Building of a WORK-HOUSE and INFIRMARY, with Specifications and Estimate. Premiums £100 and £50. My. A. F. VULLIAMY, Clerk to the Guardians.

TO ARCHITECTS.

DESIGNS and ESTIMATES are invited by Mr. N. Miller, of 95, Fishergate, Preston, Lanc. for a proposed FIRE-PROOF BLOCK of SHOPS, OFFICES, TWO HOTELS, &c., at a cost of from £45,000 to £50,000 (which latter sum must not be exceeded), on an area of 2,500 square yards abutting on to Church street, Lancaster road, Jackson-street, and Birley street, in the County Borough of Preston, Lancashire.

Premiums of £150, £100 and £50 are offered (in the adjudged order of merit) for the three designs which are selected as the most suitable, and which three designs will become the absolute property of Mr. Miller.

The winner of the first or any other premium will not necessarily or in consequence become entitled to carry out the work, but if he be selected to do so, the premium will be deducted from his remuneration.

A plan of the site with instructions to Architects can be obtained from Mr. MILLER, on payment of £1 1s. which will be returned to those sending in *bona fide* Designs.

All Drawings, &c., must be marked with a motto or device, and sent to the Borough Engineer's Office, Town Hall, Preston, and the name and address of the designer in a sealed envelope, bearing on the outside the same motto or device, to Mr. MILLER, not later than the 27th day of APRIL, 1895.

DURHAM.—MARCH 25.

COMPETITIVE SCHEMES are invited for the SEWAGE DISPOSAL of the District. Premiums £100 and £50 for Two Best Schemes. Mr. F. MARSHALL, Town Clerk, Durham.

BOROUGH of PENZANCE. TO ARCHITECTS.

The Town Council is prepared to receive COMPETITIVE DRAWINGS for the erection of an INFECTIOUS DISEASES HOSPITAL at a cost of about £3,000.

Premiums of 30 Guineas, 20 Guineas, and 15 Guineas are offered in the order of merit for the three plans which are adjudged by the assessor to be the most suitable.

A tracing of the site, with levels marked thereon, also "Instructions to Architects," will be supplied by the Borough Surveyor, on payment of One Guinea, which will be returned on receipt of Competitive Drawings.

The Drawings, marked with a motto or device, and accompanied by a sealed envelope containing the name and address of the designer are to be delivered at the Borough Surveyor's Office, Public Buildings, on or before TUESDAY, the 19th of MARCH.

T. H. CORNISH,
Town Clerk.

January 16th, 1895.

TO ARCHITECTS.

The Governors of the Portmadoc County School invite DESIGNS of a proposed NEW SCHOOL for Intermediate and Technical Education.

For conditions and requirements apply to

W. MORRIS JONES, Solicitor,
Bank place, Portmadoc, Clerk to the Governors.
January 19th, 1895.

MR. C. E. DEACON, architect of Liverpool, has been successful in a limited competition for new school board offices for the City; the estimated cost of the work is not stated.

We understand that Messrs. Thornton & Son, of Liverpool, have secured the contract for the superstructure of the new post office in Victoria Street, Liverpool. The amount of the contract is stated to be £112,000.

The town council of Rochdale have adopted a fair wages clause in their agreements with contractors, with the following addition to it:—"That a clause be inserted in all contracts that the contractor shall forward with the original tenders a list of the names of the sub-contractors."

The pressure reducing and regulating tank for the North Pentland waterworks has just been completed at Firhill, Craiglockhart. The tank is 112 feet square, with a depth of 20 feet, and a capacity of a million and a half gallons. The tank is built entirely of brick and cost £10,000.

The provisional committee, formed for the purpose of promoting a new line from Manchester to the North, have chosen Newcastle as their headquarters. They have also resolved to proceed with a Bill in the session of 1895.

PUBLIC Parks and Recreation Grounds are cropping up all over the kingdom. The latest is an enclosure of 17 acres of freehold land just presented to the Corporation of West Bromwich.

THE ancient Cross of Newton-on-Ayr having been unearthed, a committee of the town council are endeavouring to find a suitable site for its re-erection. Perhaps some enterprising American will eventually obtain it for his front garden.

AMONG the persons injured by the disastrous explosion of powder in the gunsmith's shop, at Darlington, on Tuesday, was Mr. G. Gordon Hoskins, J.P., F.R.I.B.A.

THE local board of Mumbles have appointed a surveyor at a salary of £130 a year. For another £5 a year they might have combined the duties of a town crier with that of surveyor.

DECAYED STONWORK
Permanently RESTOREDWITH
Tabary's Patent Metallic Stone Cement.

ESTIMATES FURNISHED BY

A. DREYFUS & CO.,

21, Edmund Place, Aldersgate St., London, E.C.

BRICKS2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS.****LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.**
Low Quotations for **Truck Loads of Three Thousand** to any London or
Country Railway Station.**A. W. ITTER,** Brick Manufacturer, Fletton House, **PETERBOROUGH.**
Brickworks and Railway Siding on Great Eastern Railway.

Telegrams—"ETRIDGE, Bethnal Green."

ESTABLISHED 1866.**J. J. ETRIDGE, JUNR.,**

Slate Merchant, Slater and Tiler,

BETHNAL GREEN SLATE WORKS, LONDON, E.**ROOFING SLATES.***In addition to the usual Wharf Stock of about 2000 tons, the undermentioned Cargoes are on the way. Lowest possible Prices for Truck-loads delivered to any Station in England, or alongside in craft.***PENRHYN BANGOR.**

Ex "Moss Rose."

2,000	1st Blue	24×12
5,000	do.	18×12
2,000	do.	18×10
4,000	do.	16×12
28,000	1st Red	18×12
7,000	do.	16×12
30,000	1st G & W.	24×12
2,000	do.	22×12
4,000	do.	20×12
18,000	do.	20×10
14,000	do.	18×10
2,000	do.	18×9
10,000	do.	16×12
7,000	do.	16×10
2,000	do.	16×9
3,000	do.	16×8

PENRHYN BANGOR.

Ex "Elizabeth Charlotte."

30,000	1st G & W.	24×12
2,000	do.	22×12
4,000	do.	20×12
18,000	do.	20×10
14,000	do.	18×10
2,000	do.	18×9
10,000	do.	16×12
7,000	do.	16×10
2,000	do.	16×9
3,000	do.	16×8
2,000	1st Blue	24×12
5,000	do.	18×12
2,000	do.	18×10
4,000	do.	16×12
28,000	1st Red	18×12
7,000	do.	16×12

PORT MADOC (Oakeley's)

Ex "Three Janes."

14,000	20×10	Best Meds
22,000	18×10	do.
30,000	18×9	do.
15,000	16×10	do.
5,000	16×9	do.
20,000	16×8	do.

GERMAN BLUE.

Ex "Eastern Belle."

8,000	18×9	Best Blue
50,000	16×10	do.
30,000	16×8	do.
10,000	20×10	Best Green
5,000	18×10	do.
13,000	16×8	do.

Westmoreland and other Descriptions of **GREEN SLATES**, also **ROOFING TILES**, supplied only, or fixed by Contract in any part.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

HUDDERSFIELD.—Accepted for additions, &c., to school buildings, Knowl Bank, Golcar, for the School Board. Mr. J. Berry, architect, 9, Queen street, Huddersfield:—

Masonry.—Haigh, A. and T., Golcar	
Joinery.—Varley, J., and Son, Slaithwaite	
Plumbing.—Marsden, John, Huddersfield	
Plastering and Painting.—Lane, Ed., Slaithwaite	
Slating and Concreting.—Jowitt, W. E., John William street, Huddersfield	£2,600 0 0
Ironwork.—Cooper, Leonard, 32, Park row, Leeds	
Wood Block Floor, &c.—Cooke, John, Little, Royd, Huddersfield	
Iron Railing.—Rayner, T. H., Market street, Huddersfield	

BARROW-IN-FURNESS.—For the execution of sewage-outfall works, &c. (1,200 yds.), for the Corporation. Mr. Fox, Borough Engineer, Town Hall, Barrow-in-Furness:—

Gibson, T.	£13,157 13 6
Williamson and Co.	8,351 4 9
Moffat, J.	8,184 6 4
Watts, E.	7,483 2 7

* Accepted for works complete, including iron pipes.

BRENTFORD.—For rebuilding "The Bunch of Grapes" public-house, Ferry Island, Brentford, for the Hounslow Brewery Company, Limited. Mr. S. Woodbridge, jun., architect and surveyor, 210, High street, Brentford:—

Gregory and Co.	£1,797 0 0
Hanson and Co.	1,664 0 0
Avis and Co.	1,607 0 6
Landsdown and Co.	1,497 0 0
Barnes, J.	1,487 0 0
Hiscock, T.	1,460 10 0
Dorey and Co. (accepted)	1,460 0 0

[Architect's estimate £1,500]

CHESTER-LE-STREET.—For building court-house and additions to Chester-le-street police station, for the Standing Joint Committee of the County. Mr. William Crozier, County architect, Durham. Quantities by Mr. J. Ezra Miller, Sunderland.

Jopling, J., Chester-le-street	£1,618 7 2
Oates, I., Picktree	1,597 5 0
Hunter, T., Washington	1,528 17 0
Graddon and Son, Durham	1,488 10 0
Draper and Sons, West Rainton	1,469 15 1
Kell and Groves, Chester-le-street	1,416 10 6
Elliot, J., North Shields	1,410 0 0
Thompson and Son, Chester-le-street*	1,358 2 6

* Accepted.

CARDIFF.—For the erection of school-room at Congregational Chapel, Cowbridge road. Mr. Edwin Seward, architect, Queen's chambers, Cardiff:—

Jones, D. C.	£725 0 0
Jones and Thornley	667 10 0
Symonds, W.	649 10 0
Hatherley and Carr	627 0 0
Haines, J.	595 0 0
Evans, B.	593 4 0
Howell, A.	590 0 0
Coburne, A. J.	588 3 8
Latty and Co.	587 0 0
Morgan, H.	578 14 0
Best, W., and Co.	572 0 0
Price, C.	566 0 0
Morgan, W. T.	565 0 0
Knox & Wells	558 0 0
Evans, E. R., Bros.	546 6 9
Dunn, C. C., Cardiff (accepted)	534 14 2

BIRMINGHAM.—For the erection of Free Public Library at Balsall Heath, for the City Council. Messrs. Jethro A. Cossins and Peacock, architects. Quantities by Messrs. Harris and Harris, Birmingham and London:—

Taylor, S.	£5,525 0 0
Johnson, T.	5,367 0 0
Hopkins, W.	5,200 0 0
Sapcote, W., and Sons	5,141 0 0
Surman, S., and Son	5,110 0 0
Whitall, W. J., and Son	5,099 0 0
Rowbotham, J.	4,997 0 0
Barnsley, J., and Sons	4,988 0 0
Whitehouse, B.	4,972 0 0
Moffat, J., and Sons	4,967 0 0
Webb, W. and J.	4,945 0 0
Bowen, J.	4,885 0 0
Fenwick, R. (accepted)	4,750 0 0

BETHNAL GREEN, E.—For enlarging and refitting the offices in connection with the Mansford street School, Old Bethnal Green road, and for providing a partly new system of drainage, for the London School Board:—

Parker, G.	£1,590 0 0
Harrison and Spooner	1,577 0 0
Lawrance, E., and Sons	1,550 0 0
Newton, G.	1,518 0 0
Garrett, J., and Son	1,480 0 0
Calnan, M., and Co.	1,388 0 0
White, T., and Son	1,329 0 0
Minter, F. G., Johnson street, Westminster (accepted)	1,165 0 0

COSHAM, HANTS.—For sewerage outfall works, for the Rural District Council of Fareham Union. Mr. Archibald Ford, Assoc.M.Inst.C.E., 11, High street, Portsmouth, engineer:—

Cooke and Co., London	£1,987 0 0
Hall, J. F., Portsmouth	1,847 0 0
Bevis, F., Portsmouth	1,780 10 0
Light, W. R., and Son, Portsmouth*	1,763 0 0

* Accepted.

DURHAM.—For the erection of new Court House, &c., Chester-le-Street. Mr. William Crozier, Durham County Architect, Shire Hall, Durham. Quantities by Mr. J. Ezra Miller, Sunderland:—

Jopling, Joseph	£1,618 7 2
Oates, Isaac	1,597 5 0
Hunter, Thomas	1,528 17 0
Graddon & Son	1,488 10 0
Draper and Sons	1,469 15 1
Kell and Groves	1,416 10 6
Elliot, Joseph	1,410 0 0
Thomson and Son, Chester-le-Street*	1,358 2 6

* Accepted.

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

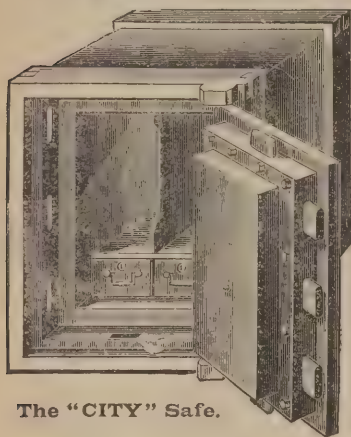
J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

F. WHITFIELD & CO.,

MANUFACTURERS OF

Fire and Burglar-Resisting

SAFES AND IRON DOORS



The "CITY" Safe.

ALSO
PARTY WALL
OR
INSURANCE DOORS.

FOR
**ARCHITECTS,
BUILDERS,
AND
CONTRACTORS.**



No. 37 Door.

OXFORD STREET, BIRMINGHAM,
AND
20, CHEAPSIDE, LONDON, E.C.

FARNHAM.—For erecting the East street schools, Farnham.
Mr. J. A. Eggar, architect, Farnham, Surrey:—

Hall	£7,780	10	0
Belham and Co.	7,473	0	0
Martin, Wells, and Co.	6,890	0	0
Patrick and Co.	6,796	0	0
Smith	6,757	10	0
Chuter	6,598	10	0
Field and Co.	6,568	0	0
Goddard and Sons	6,548	0	0
Hughes	6,469	0	0
Jenkins and Sons	6,449	0	0
Kemp	6,397	0	0
Fitt	6,279	0	0
Bottrill and Son	6,230	0	0
Peters	6,125	0	0
Chinchen, Bournemouth*	5,700	0	0

* Accepted subject to the approval of the Education Department.

HIGHBURY, N.—For rebuilding the offices of all departments of the Gillespie road school, Highbury Vale, and for providing a partly new system of drainage, for the London School Board:—

Grover, J., and Son	£1,582	0	0
Knight, H., and Sons	1,571	0	0
Stevens Bros.	1,462	0	0
Vernall, Danes, and Co., Albany street, N.W. (accepted)	1,292	0	0

KEGWORTH (Leicester).—For the construction of covered reservoir and distributing mains for the Castle Donington Rural District Council. Mr. Geo. Hodson, C.E., Bank chambers, Loughborough:—

Maclean, John	£3,859	15	0
Johnson, J. E., and Son	3,750	0	0
Vernon, H.	3,490	15	10
Bell, G.	3,468	0	0
Shardlow, H.	3,460	0	0
Smith, Thomas	3,417	0	0
Smith, W., and Son	3,405	14	0
Roberts, Henry	3,395	0	0
Kitteringham, M. S.	3,315	0	0
Brampling and Kelham	3,305	0	0
Clay Cross Company	3,300	0	0
Hodson and Sons	3,265	0	0
Siddons and Freeman	3,260	0	0
Bentley, S. and E.	3,250	0	0
Todd, G. F.	3,185	10	7
Shaw, A.	3,178	5	6
Price, J. F.	3,120	0	0
Vickers, J. H.	3,050	0	0
Barker Thomas	2,987	0	0
Brown and Ball	2,949	0	0
Mess, W., and Son	2,879	10	0
Perkins, J., Loughborough (accepted)	2,845	15	7

LONDON.—Accepted for the supply of road materials, for the London County Council:—

Messrs. Tuff and Miskin, granite chippings, at 10s. 2d. per cubic yard; Mr. H. Covington, surface flint, at 5s. 6d. per cubic yard, for use in Battersea park.
Messrs. Alderton and Son, Croydon or other approved wall gravel, at 6s. 9d. per cubic yard, and Messrs. Tuff and Miskin,

Croydon or other approved hoggins, at 7s. per cubic yard, for use in Brockwell park.

Mr. G. W. Riley, best Croydon or other approved hoggins, at 5s. 6d. per cubic yard, and best Croydon or other approved wall gravel, 5s. 9d. per cubic yard; Mr. J. S. Gabriel, shell gravel at 6s. 5d. per cubic yard, for use in Dulwich park.

Mr. R. Ballard, Hatfield gravel, at 6s. 9d. per cubic yard, and Wheathampstead hoggins, at 6s. 3d. per cubic yard; Messrs. Tuff and Miskin, shell gravel, at 6s. per cubic yard; Messrs. Stubbings and Son, sand, at 6s. per cubic yard, for use in Finsbury park.

Mr. W. Griffiths, surface flints, at 5s. 11d. per cubic yard, hoggins at 5s. 5d. per cubic yard, granite chippings, at 10s. 2d. per cubic yard, and cockle-shell, at 4s. 11d. per cubic yard, for use in Victoria park.

LONDON.—For rebuilding No. 96, Powis street, Woolwich, SE., and workrooms in rear, for Messrs. S. H. Cuff and Co. Mr. H. H. Church, William street, Woolwich, architect. Quantities by Mr. W. Whincop, 15, Kyverdale road, Stoke Newington, N.W.:—

Chapman, J.	£2,570	0	0
Young and Lonsdale	2,424	0	0
Munday and Sons	2,418	0	0
Holloway, H. L.	2,390	0	0
Balam Bros.	2,367	0	0
Chessum and Sons	2,253	0	0

NEWBRIDGE (Mon.).—For the erection of school buildings, for the Mynyddislwyn School Board. Mr. Geo. Rosser, architect, Victoria buildings, Abercarn. Quantities by Mr. R. L. Roberts, Newbridge, Mon.:—

Hatherley and Carr	£3,395	0	0
Williams and James	3,349	8	8
Jones, D. C., and Co.	3,254	0	0
Francis, J., and Son	3,189	0	0
Morgan and Evans	3,067	0	0
Westacott, T.	3,034	10	0
Parfitt, Hy.	3,000	0	0
Lewis, Dd.	3,000	0	0
Richards, A.	2,985	0	0
Linton, Jno.	2,950	0	0
Morgan, C. F.	2,920	0	0
Davies Bros.	2,885	0	1
Monks and Co.	2,773	15	0
Gaen Bros.	2,740	17	0
Jenkins, John, Newport, Mon.*	2,530	0	0

* Accepted.

STAINES.—For the construction of sewerage and sewage-disposal works (Contract No. 1), for the Urban District Council. Mr. G. Maxwell Lawford, C.E., 13, Victoria street, S.W. Quantities by Messrs. Pryce, Cuxson and Leigh:—

Wimpey, G., and Co.	£17,031	18	0
Osenton, Geo.	15,538	0	0
Bell, Geo.	15,278	0	0
Adams, T.	15,072	5	5
Hill, H.	13,439	19	0
Dickson, James	13,494	0	0
Cooke, B., and Co.	13,220	0	0
Mowlem, John, and Co., Westminster*	13,000	0	0
Wilkinson, Bros.	12,938	0	0
Jackson, John	11,707	16	0

Contract No. 2 (Engines and Ejectors).

Hughes and Lancaster, Westminster* ... £13,379 11 2

* Recommended for acceptance.

SOUTHALL (Middlesex).—For the supply of granite cubes, kerbing, &c., for the Southall-Norwood Urban District Council. Mr. Thomas Newall, Surveyor, Avenue road, Southall:—

	100 tons	700 ft. run
	Leicestershire Granite Cubes.	Norway Granite Kerbing.
	s. d.	s. d.
Manuelle, A. and F.	1 7 11 per ton	1 3 8 per ft. run
Tildesley, Sheppard and Mabson	1 9 6 "	1 4 1 "
Free and Sons	0 8 0 per yd.	1 7 "
Praagh, E. J. Van, and Co.	1 8 6 per ton	1 2 "
Mowlem and Co.	1 9 9 "	1 4 "
Cooper Bros.	1 9 "	1 2 1/2 "
Griffiths, Wm.	1 11 0 "	1 3 "
Ireland and Knight (rail)	1 7 0 "	1 5 "
(boat)	1 6 0 "	1 4 1/2 "
Trickett and Sons	1 12 6 "	1 5 "
Broderick, J. E., and Co.	1 8 2 "	1 4 "
Wimpey and Co.	1 12 0 "	1 10 "
Newell and Robson, Warwick road, Kensington	—	1 2*
Taylor, W., The Quarries, Atherstone	1 5 0*	—

* Accepted.

TORQUAY.—For the erection of a church, Cockington, Mr. C. A. Nicholson, architect, 11, Beaumont street, W. Quantities by Mr. J. E. Drower, 16, Great George street, S.W.:—

		If Corsehill-stone for arches, &c., add
Wilkins, R., and Sons	£3,550 0 0	£149 0 0
Roberts, S.	3,526 0 0	42 0 0
Wilkins, G. H.	3,450 0 0	120 0 0
Brown, J.	3,449 0 0	5 0 0
Cocks, Chas.	3,427 10 0	5 0 0
Hawkins, S.	3,375 10 0	nil.
Julian, James	3,343 0 0	118 0 0
Rabbich and Brown	3,330 0 0	nil.
Lethbridge, A. R.	3,320 0 0	130 5 0
Goss, Wm. A.	3,251 6 0	nil.
Blowey, P.	3,250 0 0	100 0 0
Trask, C., and Sons	3,235 0 0	149 0 0
Goad, J., and Co.	2,998 0 0	80 0 0
Claridge and Bloxham	2,900 0 0	210 0 0
Gooding, W. H.	9,820 0 0	198 4 0
Yeo, R. F., Fleet st., Torquay (accepted)	2,715 0 0	159 0 0

NOTICE.—The last paragraph of "BRICKS AND MORTAR" should be very carefully perused.

RENDLE'S

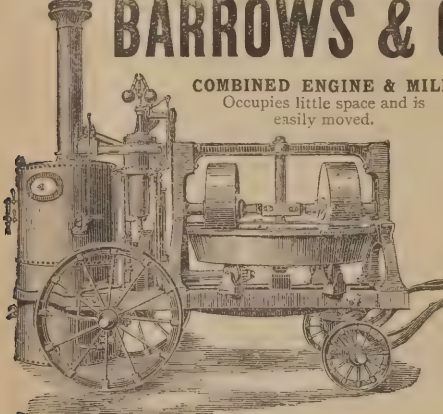
"INVINCIBLE"

GLASS ROOFING

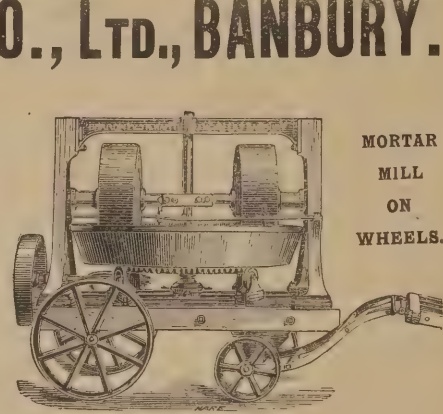
DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

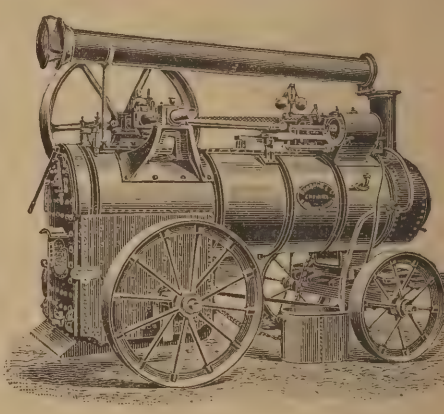
BARROWS & CO., LTD., BANBURY.



COMBINED ENGINE & MILL
Occupies little space and is easily moved.



**MORTAR
MILL
ON
WHEELS.**



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

CONTRACTS OPEN.

MIDLAND RAILWAY.

TO CONTRACTORS AND BUILDERS.

The Directors of the Midland Railway Company are prepared to receive TENDERS for the following works:—ERECTION OF SIX COAL OFFICES, WALTHAMSTOW. ERECTION OF SIX COAL OFFICES, LEYTON.

Plans and specifications may be seen, quantities and particulars obtained, on application to the Company's Architect, Cavendish House, Derby; or at the Engineer's Office, Derby Station, on and after SATURDAY, 9th inst.

Sealed Tenders to be forwarded by post to the Secretary of the Way and Works Committee, Midland Railway, Derby, not later than NINE a.m. on THURSDAY, 14th inst.

The Directors do not bind themselves to accept the lowest or any Tender, nor to pay any expenses attending the same.

Derby, JAMES WILLIAMS,
Secretary.
February, 4th, 1895.

TO BUILDERS.

THE NEW BOARD SCHOOL, ASHFORD, KENT.
The Ashford School Board are desirous of receiving TENDERS for the ERECTION of a new BOARD SCHOOL, with MASTER'S RESIDENCE and OFFICES in Victoria road, Ashford, Kent.

All Builders who wish to Tender must send their names and addresses to Mr. H. J. JEFFERY, Architect, Ashford, Kent, on or before FRIDAY, 15th FEBRUARY next. They can obtain from him on and after TUESDAY, 19th February, on payment of a Guinea, a bill of quantities.

The plans and specifications can be seen at the Architect's Office during business hours on and after 8th FEBRUARY.

The deposit of a Guinea will be returned on receipt of a *bona-fide* Tender.

Sealed Tenders, endorsed "Tender for New Board School and Residence," must be received by me, the undersigned JAMES FRASER, not later than MONDAY, 4th MARCH next.

Neither the lowest nor any Tender will necessarily be accepted.

No. 87, High street, Ashford, Kent. Clerk to the Board.
January 17th, 1895.

TO BUILDERS.

TENDERS are invited for BUILDING VILLA RESIDENCE and STABLING at Rayleigh, Essex. Bills of quantities obtained on payment of Three Guineas, which will be returned on receipt of a *bona fide* Tender, on making application to the Architect, Mr. JAMES THOMPSON, Cliff Town road, Southend-on-Sea.

Sealed Tenders to be delivered at the Architect's Office on or before THURSDAY, the 21st FEBRUARY.

No pledge is given to accept the lowest or any Tender.
Dated January 28th, 1895.

THE VESTRY OF THE PARISH OF ST. MARY, BATTERSEA.

TO CONTRACTORS AND OTHERS.

The Vestry of the Parish of St. Mary, Battersea, are prepared to receive TENDERS for the several WORKS and SERVICES, and for SUPPLY of ARTICLES and MATERIALS, as undermentioned, for One, Two, or Three Years (at the option of the Vestry), from the 26th MARCH next—Repairs and Maintenance of Road Watering Posts.

Horse-hire,
Scavengers' Bass Brooms.
Circular " " "
Disinfectants, " " "
Bricks, Cement, Lime, Slates, &c.
Side Entrance Covers, Manhole Covers, &c.
Gravel, Flints, &c. (with the exception of Pit Flints and Fine Gravel or Hoggins).
Ironmongery.
Iron Bars, &c. for Blacksmith's Work.
Timber for Carpenter's and Joiner's Work.
Wheelwright's Work.
Coal and Coke.
Oils, Soaps, &c.
Paints, &c.

Also for the supply of Guernsey and Alderney Granite, Cornish and Enderby or Narborough Stone, the Shoeing of Horses, the Removal of Road Grit, Slop and Sweepings, and the Removal of Manure, for One Year.

Samples of the Granite and Stone (one third of a yard) and Scavengers' Bass Brooms, must be delivered at the Municipal Buildings, Lavender Hill, on or before SATURDAY, the 16th FEBRUARY at the cost of the persons Tendering.

Specifications and forms of Tender and further particulars may be obtained of the Surveyor to the Vestry, Mr. J. T. PILDITCH, at the Municipal Buildings, between the

hours of TEN a.m. and FOUR p.m. (Saturdays between TEN a.m. and ONE p.m.) and no Tender will be considered unless the same be made upon the official form, and samples are forwarded as required.

Tenders, which must be in separate envelopes, sealed, and marked on the outside "Tender for ———," must be delivered to me at the Municipal Buildings, on or before SATURDAY, the 16th FEBRUARY instant, and, with the exception of the Tenders for Oils, Soaps, &c., Paints, &c., Shoeing Horses, and the Removal of Manure, must contain the names and addresses of two responsible persons who are willing to join the contractor in a contract for the due execution of the same.

All contracts will be prepared by and at the expense of the Vestry.

Persons Tendering will be required to declare in their Tender that they pay the Trades Union rate of wages.

The Vestry do not bind themselves to accept the lowest or any Tender.

By order of the Vestry of the Parish of St. Mary, Battersea,
W. MARCUS WILKINS,
Municipal Buildings,
Lavender Hill, S.W.
January 30th, 1895.

FOR SALE.

FOR SALE, several thousand feet of PITCH-PINE TIMBER, been used as piles, 14in. by 14in., 12in. by 12in., 6in. by 12in., squared for sheet piles. Completion of contract. Must be cleared at once. Can be seen in River Lea alongside Three Mills Bridge, Bromley.—Offers to be sent to E. ILES, Tamworth Lodge, Mitcham Common. To inspect the timber please apply at 57, Three-mills Lane, Bromley-by-Bow.

STREETE. COURT ESTATE, WEST-GATE-ON-SEA.—This valuable FREEHOLD BUILDING LAND to be SOLD in Plots. The estate is situated in a most advantageous position, within two minutes of station and five minutes of sea, and is ripe for the immediate erection of small villa residences, for which there is a great demand at Westgate.—For particulars apply to Messrs. E. E. CROUCHER & Co., Land Agents and Surveyors, 76, Chancery lane, London, W.C.

The Builders' Journal.

Vol. I., No. 2.

Tues., Feb. 19, 1895.

ILLUSTRATIONS.

Grand Staircase, Imperial Institute	17	All Hallows Church, Gospel Oak	23
All Hallows Church, East Elevation	18	Portrait of Mr. Thomas Colcutt	24
All Hallows Church, West Elevation	19	Upper Part of East and West Wings, Imperial Institute	24
Mosaics from The Greek Church, Bayswater ..	20, 21, 22	The Queen's Tower, Imperial Institute	25
Castor Church	20	Portrait of Mr. James Brooks	26
Corner of Barnard's Inn	21	Ornamental Screen, Imperial Institute	26
Magdalen College, Oxford	22	Corridors and Interior Doorway, ditto	27

CONTENTS.

A Little More of Ourselves	17	Reginald Stuart Poole	19	A Chat with Norman Shaw, R.A.	29
Light Railways	17	Bricks and Mortar	20	Jean Francois Millet	29
The Gold Medallist	17	Men who build, No. 2,—		Irish—Architecture	30
The Advancement of Architecture	18	Mr. Thomas Colcutt	24	Society Meetings	31
The Mediæval Manor House	18	The Royal Institute of British Architects ..	26	Decay of Buildings	31
Church of All Hallows	19	On Observation, by Leonard Stokes,		Correspondence	31
		F.R.I.B.A.	28	Books Received	32

The Builders' Journal.

A little more of Ourselves. WE are extremely thankful for all the good opinions, and good wishes, and good sugges-

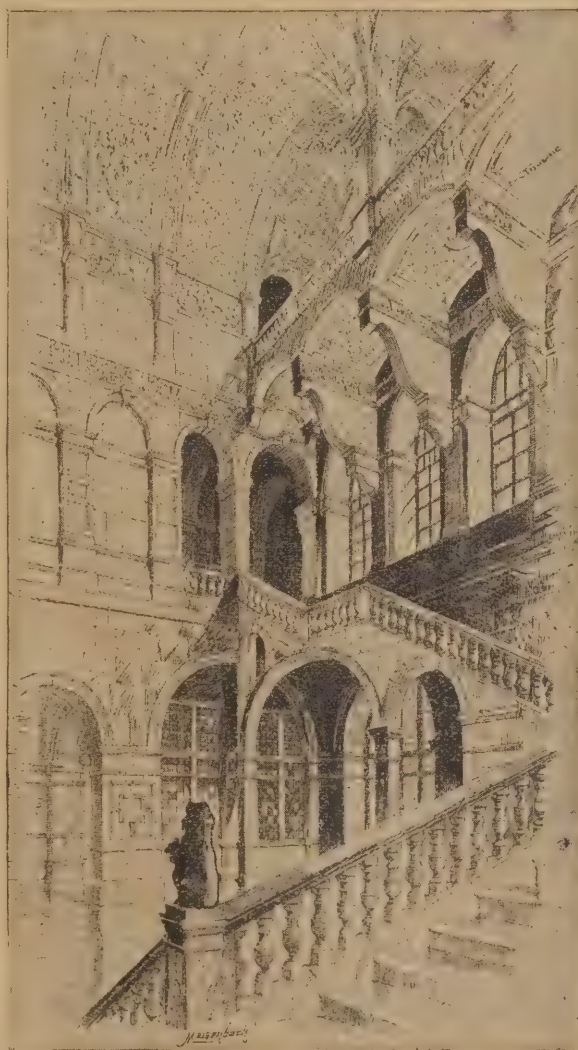
tions showered upon us by our good friends, and as it is impossible to write personally to each one, we hope all will consider that our thankfulness is sincere. Many suggestions we are able to accept; for instance, we discard Notes and Queries, and in its place give our younger architectural friends an opportunity of making some careful studies in design, and aspiring to the gold medal and other awards which the proprietors have determined to offer. Particulars of this will be announced next week. With our third number we hope to commence a series of illustrated papers upon "Architectural London" which will be fearlessly critical but honest. We then have in preparation a series of "Architects of the past," the first of which will be the great Sir Christopher, and a clever descriptive writer of repute is collecting an interesting series of papers upon the monuments of English domestic architecture. The first of our special signed papers we also hope to publish next week.

Light Railways.

THE prosperity of building as a trade is closely allied in many ways with the prosperity of agriculture, though on the surface there may be but few points of contact between them, more especially to the superficial observer. How the institution of light railways into the country is in any measure to cope with the agricultural depression we cannot see, perhaps it is that we are unable to see, but of this we are quite sure, that if it be possible to consider this new species of political red herring to be anything but a member of the very well known family of red herrings, which is extremely prolific when some political party or the other is gasping for breath, then in all seriousness we shall want a very exhaustive and detailed statement what these light railways are to be and what they are to do. We are not going to lure ourselves into a subject which, although of much moment to the building fraternity, is hedged on either side with the brambles and nettles

of political debauchery. The deeper one goes into a matter of this description the closer one gets to the land question and the eternal discords which are hourly gathering over it. And then the details of transit, freightage, and the constitution of our railway system come in, and before you know where you are

centage of individuals is of course evident, but that they could do any material amount of good, and that as an investment of capital they could possibly return the least amount of interest material or financial, we strongly doubt. But we shall see.



GRAND STAIRCASE—IMPERIAL INSTITUTE.

you find you are back at the old mill thrashing out the same old controversial corn that your great grandfathers thrashed before you. We have no faith in light railways as a relief to agriculture. That they would benefit a per-

The Gold Medallist.

SOME little surprise has been expressed by ignorant persons that Mr. James Brooks should have been chosen as the recipient of the Queen's Gold Medal of the Institute. To us it is much more than a mere coincidence that the announcement should have been made by the President on the evening when "Simplicity in Architecture" was the subject paper. If there is a man within the four corners of England who has discovered what pure simplicity of design really is—a man, who obtains an appreciable amount of beauty from a mere massing of parts, from a boldness, and sometimes, a fearlessness of design, that man is surely James Brooks. We are not, perhaps, at the moment sufficiently acquainted with much of Mr. Brook's work to give a critical review of it, but the Church of All Hallows, which is described by Mr. Brooks himself in this issue and illustrated, is the largest, and a most typical example, of his work. We know that his particular method of design does not find favour with many of his fellow architects. Some think that in its simplicity, and in its massive boldness, there is a lamentable lack of beauty and detail, two essential qualities in Ecclesiastical architecture, but that is an opinion which no competent critic can share. For our part, we welcome his large "mass" of wall space, his fierce buttresses, his bold fenestration, and although we miss, in some instances, the rare charm and subtlety of poor J. D. Sedding, there is very much in Mr. Brooks' work which brings it far from the dead level of the stock gothic Church, with its stock spire, its stock gables, and its stock porches—Churches which—architecturally of course—sicken one so terribly in the London suburbs. We hope, a little later, to prepare an exhaustive treatise on the Church work of James Brooks, and in the meantime we may congratulate the Selection Committee of the Institute on an exceedingly honourable disposal of its Royal Gold Medal.

"The Advancement of Architecture."

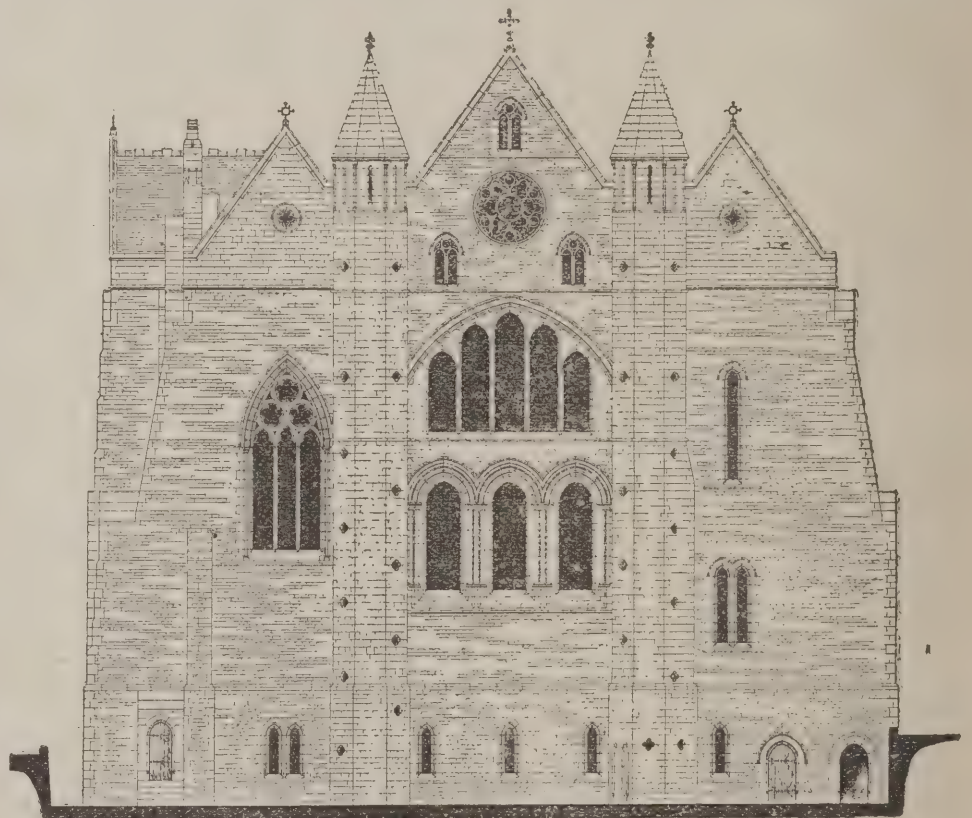
PROFESSOR AITCHISON is divulging many splendid truths to his students at the Academy. The æsthetic part of Architecture is by far the most difficult to treat, as it is of the vague rather than of the clear and definite order of things, and there has been little written on the subject that is of value. In dealing with materials, for example, you can measure and weigh them; you can by experiment find their strength in compression, tension, and cross strain; you can see how much water they will absorb in a given time; and how much they will lose by a given heat in a given time. If a great number of experiments have been made, and if you have experience, you can tell, if you use the greatest care in their selection, what to allow for variation in the quality of the materials, and for bad workmanship; and if the materials are not new you can see what deterioration takes place through time and exposure, and then, if your statical calculations are right, you can be certain that your building will stand provided there are no exceptional tempests or an earthquake. By tabulating the experiments on wrought iron and steel, and by a judicious application of the laws of statics, the great suspension, tubular, and girder bridges, as well as those gossamer like structures, such as the Crystal Palace, have been built, and have not only stood, but have been the wonder of mankind. But to make structures, or parts of structures, that answer all the former purposes and move or delight the beholders as well is in quite another category. In one case you have definite and calculable forces to resist, in the other you have to touch the unknown springs of certain emotions. You can only judge what is likely to please by what has pleased, and you have to find out, if possible, not only why they have pleased, but what are the underlying principles that have made them please. If we could discover these principles then æsthetics would be a science that everyone could learn; at present it is an art that only exceptionally gifted persons can acquire by study and instinct. In dramatic literature two of the highest aims are to make the reader cry or laugh. Horace says if you want your hearers to cry you must first cry yourself; but though many treatises have been written on the cause of tears or laughter, the manner of producing these emotions has not been reduced to a science. Now those writers who make you cry or laugh are considered to be geniuses; when this art becomes a science, the producing tears or laughter will be looked on in the same light as shoeing a horse or mending a kettle. Swift, in his "Letters to a Young Clergyman" says:—"I cannot forbear warning you, in the most earnest manner, against endeavouring at wit in your sermons, because, by the strictest computation, it is very near a million to one that you have none." Perhaps that would be good advice to all who consciously seek for what is called originality which is mostly attained by exaggeration, disproportion, and oddness of arrangement; real originality only comes from original minds, and will, in that case, show itself properly and naturally, just as wit shows itself spontaneously in the witty; for surely those original Architects, who have only been able to raise in us emotions of contempt or disgust, would have been judicious had they abstained from the attempt. I think that most architectural students, if they will only study the best buildings, will make their plans to accurately answer the purposes wanted, including the efficient lighting of the rooms; will study the Vitruvian symmetry until their eye revolts from disproportion, will try and make their profiles tell the story they want told, and will try and bring such parts that, from the exigencies of the case, obtrude themselves in odd places, into harmony with the whole, that they will pro-

duce an effect which will raise their buildings to the dignity of humanity, and out of the range of the dog-kennel and rabbit-hutch type, and will not exhibit ugliness, disproportion or vulgarity. We see plenty of examples where the designs have sunk much below this level; no building of dead walls, with holes in it for doors and windows, could cause us such disgust. Let me here say, by way of a parenthesis, that if you candidly consider that your design is more offensive than a dead wall, do not waste money and materials in making the wall more repulsive, but let it alone.

THE MEDIÆVAL MANOR HOUSE.

M^R. F. W. BEDFORD delivered a lecture before the members of the Thoresby Society, in their room at the Albert Hall, Leeds, on Tuesday night of last week, on "The Mediæval Manor House: its Architectural History." He remarked that very few manor houses were built during the 12th century. The Normans built them-

needed. In the 14th century a great development took place in Domestic architecture. To this period belong the finest domestic and collegiate buildings we have, as the colleges of Oxford, Cambridge and Winchester; Gainsborough Manor House, Wingfield and Haddon Hall. The large hall still continued to be the dominant feature in the plan, but it was less used by the owner and his guests. In 15th century manor houses the first thing that struck us was that the hall continued just as before, excepting that in many cases its size had been reduced in proportion to the increase in the number of other rooms—with drawing-rooms, dining-rooms and bedrooms. Since the end of the 15th century we have made very little alterations in the plans of our country houses. During the Renaissance period—the 16th, 17th and 18th centuries—they became more formal in plan, but did not differ materially. Great improvements, of course, have been made since in the practical fittings, sanitary arrangements, heating, and so forth; but a



ALL HALLOWS CHURCH, EAST ELEVATION.

selves fortresses in different parts of the country; but the land had not been sufficiently subdivided to call the manors into existence. From what examples we had, however, we found that they were generally built on a universal plan of a large hall with a chamber or chambers adjoining, and this formed the basis on which all manor houses were built up to the end of the 15th century. The number of chambers was increased, and other alterations in their disposition took place; but still the large central hall formed the nucleus of the plan. In most examples the hall was on the ground-floor level, and was used by the owner and his followers for both dining and sleeping. Nearly all the examples of the Domestic architecture of the 13th century were built during the reigns of Henry III. and Edward I. A great many manor houses were built at this time; but they still kept the same general arrangements in plan as in the preceding century. The customs and manner of living remained the same, and so no great alteration was

needed. In the 15th century house was often quite as convenient, as comfortable, and pleasant to live in as a modern house, and generally far more dignified and beautiful. The lecture was illustrated by means of numerous ground and upper-floor plans of manor houses.

CABLE traction is cheaper than electric traction, if we may trust the report of the Chicago City Railway Company for 1894. This company has some 35 miles of cable lines, and 26 miles of overhead electric lines at work. On the cable lines the cost of working per car-mile was 9.97 cents, while on the electric lines it was 16.90 cents, or 70 per cent. more. In 1893, the cable lines cost 9.92 cents, and the electric lines 13.6 cents, showing that in 1894 the cost of working the electric lines has increased 25 per cent., while the cable lines have only increased a half per cent. The electric lines have been laid in the last few years, with all the latest improvements, and it is universally admitted that the overhead system is the cheapest to work of all the electric systems yet established.

CHURCH OF ALL HALLOWS.

THIS church is in course of erection for the newly-formed ecclesiastical parish of All Hallows, in the northern part of the old parish of St. Pancras, and is the most recent of those which have been designed by me.

The district and church were formerly known as those of the Good Shepherd, but the Ecclesiastical Commissioners, having made a grant of funds arising from the sale of the site of All Hallows Church, Upper Thames Street, for the erection of this church, and having also assigned the endowment of the ancient church to that of the newly-formed parish, its name henceforth will also be All Hallows.

The site has for its eastern boundary the Courthope Road, for its western boundary the Sherlock Road, on the north it is bounded by Savernake Road, which abuts on Gospel Oak Fields, and on the south by a piece of vacant land, on which there is the intention of erecting a parish hall.

The material with which the walls of the church are being erected consists largely of Ancaster stone, the external facing is of rag, the internal facing is a finely-chopped Ashlar, and the core of the wall is formed with Portland cement concrete. The whole of the free stone work is also of Ancaster stone.

The church consists of a nave, with north and south aisles, separated by arcades of five bays each from the nave, a south transept of shallow depth, and chancel, separated by arcades of three bays, each from the north and south chancel aisles. The south chancel aisle is fitted up as a chapel, with a separate entrance from a narrow aisle or passage-way. An organ chamber is provided above the north chancel aisle. A crypt is constructed beneath the east end of the church, advantage being taken of the natural fall of the ground to enable this to be done. The crypt contains a parish room under the north chancel aisle, a choir vestry and a heating chamber under the south chapel, and a large vaulted clergy vestry under the chancel. At the east end of the chancel are two octagonal turrets, with staircases for access to the roofs, and one of these also affords an approach to the organ chamber. At the west end are two square turrets.

The church has a very noticeable feature, inasmuch as every part is covered with stone groining, the ribs of the vaults springing from, and growing out of, cylindrical shafts, 2 ft. 8 in. diameter, the springing being 28 ft. above the nave floor level. In order to counteract the great thrust of the groining, the buttresses project 7 ft. from the external face of the wall, and are carried up without any weathering for about 20 ft., and thence have a gentle slope upwards to within about 3 ft. of the wall.

The width of the church within the walls of nave and aisles is 64 ft., the length of nave and north and south aisles is 96 ft., the chancel is 42 ft. 6 in. long, and the north and south chancel aisles are each 37 ft. long.

The accommodation is for nearly 1,400 persons, and the cost is approximately £20,000.

At the present time the walls have been carried up to the level of the tops of the window heads in north and south aisles, or about 35 ft. from the nave floor.

The contractors are Messrs. T. Rudd & Son, of Grantham, Lincolnshire.

JAMES BROOKS, V.P.R.I.B.A.

15th Feb., 1895.

PLANS for the new pier at Morecombe have been prepared. The site selected by the directors for the structure is opposite the end of Regent Road. Its total length will be 923 yards, with a pavilion situated about 250 yards from the promenade, and calculated to hold about 1,800 persons.

REGINALD STUART POOLE.

IN the death of Reginald Stuart Poole Egyptology and numismatics have lost their brightest light. Born in London, on February 27, 1832, the son of the Rev. E. R. Poole, M.A., and of Sophia Lane, a grand-niece of Gainsborough, he was brought up chiefly by his uncle, Edward Lane, the Orientalist. It was as a boy that he accompanied his uncle to Egypt, and remained with him there for seven years, during the time that his relative was accumulating materials for his great Arabic Lexicon. So completely did he abandon himself to the influence of his surroundings, that when he was sixteen he was able to contribute a series

devoted his life to the primary duty of publishing catalogues of the National Collection. The remarkable energy devoted to the medal-room did not, however, stifle the old love of ancient Egypt, which was refreshed by an archaeological mission to Cyprus and Alexandria in 1869-70. From time to time he wrote and lectured on Egyptology, and in 1882 he reprinted, under the title of "Cities of Egypt," a brilliant series of papers contributed to the *Contemporary Review*. The book was appropriately dedicated to his mother, who had written "The Englishwoman in Egypt" nearly forty years before, and who spent her last years in her son's well-known house in the Museum quadrangle in an atmosphere of filial devotion. When



ALL HALLOWS CHURCH, WEST ELEVATION.

of articles on Egyptian Chronology to the *Literary Gazette*. A couple of years later the influence of Algernon, fourth Duke of Northumberland, obtained young Poole's admission, in 1852, to the Department of Antiquities in the British Museum, and so great was his youthful reputation that he received his nomination from all the three principal Trustees, the Speaker, the Archbishop and the Lord Chancellor. In 1864 Poole made his first appearance at the Royal Institution, taking as his theme the importance of Greek coins as illustrating Greek Art. On this subject he was the pioneer. In 1866 Mr. Poole was appointed Assistant Keeper of Coins, and in 1870 he succeeded Mr. Vaux as Keeper, and thenceforward he

Miss Amelia B. Edwards conceived the formation of the Egypt Exploration Fund" she found a zealous colleague in Mr. Poole, who took a leading part in all the business of the Society, devoted his utmost energies to its success, and remained its honorary secretary to his death. When in 1885 he succeeded his old friend and colleague, Sir Charles Newton, in the Yates Professorship of Archaeology at University College, he converted what had been a chair of purely Greek archaeology into a means of general instruction in all the chief branches of antiquities, Oriental, Classical and Mediæval. The articles on "Egypt," "Hieroglyphics," and "Numismatics" in the *Encyclopædia Britannica* are from Mr. Poole's pen.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
19th February, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

MR. ALEX. H. HAIG, whose etchings of church interiors are so well known, delivered a lecture last week to the members of the Leeds and Yorkshire Architectural Society, in the Law Institute, Albion Place, Leeds. The subject of the paper was "Wisby and Gotland in the Baltic." As might be expected of an artist whose aim seems to be the delineation of the most beautiful of architectural structures, and who possesses great technical knowledge of his art, Mr. Haig had no difficulty in interesting his audience. The exhibition of his sketches and drawings on the screen also tended to heighten the interest. The lecturer first dealt with the religion, customs and legends of Gotland, an island of which Wisby is the principal town. The churches were at first constructed of wood. By-and-by those were replaced by stone buildings, but not a single entirely new church had been erected since 1411. The wall surrounding Wisby was



MOSAIC FROM THE GREEK CHURCH,
BAYSWATER.

erected during the latter half of the thirteenth century, and was, perhaps, the most remarkable work of its kind. The first wall was in the course of years heightened and thickened, and between the existing towers smaller towers were constructed. The wall was from 20 to 30 feet high, and the towers from 60 to 70 feet high. Five of the large towers contained the town gates, which had formerly portcullises and out-works. The wall was 11,200 feet in extent. In the ancient days that wonderful construction protected fifteen churches, the king's palace, and streets swarming with merchants, soldiers, sailors from all parts, priests and civilians. That continued till 1361, when the place was taken and plundered by a Danish king. The town revived after that, but the crash came in 1525, when it was stormed, and the northern part burned. Mr. Haig described the more interesting and beautiful features of his sketches, principally of churches, which were thrown on the screen.

ONE of the most remarkable incidents in connection with the present prolonged frost has been the maintenance of large traffic in the Grand Surrey Canal, between Rotherhithe and the Old Kent Road Gas Works. Other branches of the canal have been ice-bound for some considerable time, but when, a fortnight ago, there seemed every probability of the South Metropolitan Gas Company's coal supply being stopped, steps were at once taken to guard against such a disaster. Gangs of men were set to work to break up the ice between Rotherhithe and the Gas Works, and afterwards to drag it out of the canal. The Company had special implements made for the work. As a result of a fortnight of this work, the banks of the canal now present an extraordinary scene. A solid wall of ice, from 8 feet to 10 feet high and several feet wide, extends from outside the gas works to the lock at the docks. The ice wall is, it is stated, about two miles long, and several hundred men have been daily engaged in its construction. Notwithstanding the Company's exertions to keep a passage open, half-a-dozen horses have frequently had to be employed to tow a barge of coal up the canal to the gas works. The icemen are being paid at the rate of 6d. an hour, and they work nine hours a day.

We have unwittingly, and of course unwillingly, aroused the fiend in the breast of our good friend Mr. Leonard Stokes, who has taken exception to the foot note attached to the first instalment of his paper "On Observation," which we published last week. But the storm is in a very tiny tea cup. We do not quite see where our note offends, and Mr. Leonard Stokes, whom we know to be one of the best of fellows, has by this time, we hope, regained the usual serenity of his normal temperament. The whole gist of "On Observation" could very well have been contained in a column of good literature. By good we mean clever literature, and as Mr. Stokes lays no pretensions to literary culture, there is no offence there. All authors who read papers before professional societies are compelled to "fatten" their matter to make the reading of it occupy a sufficiently lengthy period of time, and that compulsion, as in the case of "On Observation," destroys a great deal of what, under better conditions, might be fairly convincing argument.

AT the last meeting of the Sunderland Guardians the House Committee specially recommended:—That the plans of the proposed new infirmary, as prepared by the architect, be approved; that the front administration block, two pavilions, corridors, maternity pavilion, probationary pavilion, laundry and boiler house, and mortuary be erected (leaving the kitchen and staff apartments on male and female side to be erected at some future time), at the estimated cost of £34,725; that application be made to the Local Government Board for power to borrow a sum not exceeding £35,000, to be repaid in thirty annual instalments of principal, with the interest on the balance remaining each year. The Chairman explained that, under pressure of the Local Government Board, the Guardians were compelled to erect an infirmary. In the competition the plans of Mr. J. Shields were accepted. They would cost £50,000 to carry out. Owing to the depressed state of trade, it was necessary to restrict the expenditure to £35,000. The recommendation was adopted.

In connection with the last meeting of the Old Edinburgh School of Art, Mr. G. H. Capper read a paper on "Holyrood Abbey." Mr. J. R. Findlay, the chairman, at first expressed regret that the Royal apartments in Holyrood Palace, which had very considerable

architectural interest, were not open for public inspection. Many of the Royal palaces abroad were so open, and at Windsor the State apartments were regularly shown to visitors, except when the Queen was in residence there. He could not see why the rooms in Holyrood Palace should be closed except to a few favoured people who were invited as guests by the Lord High Commissioner. If the members of Parliament for the city and the municipal authorities exerted themselves a little, the rooms, he thought, might be opened to inspection by the public.



BY A. B. MITCHELL.

He would never for a moment expect to see through Balmoral, or any private residence of the Queen, but Holyrood was not a private residence of the Queen, but a palace belonging to the people. Further, he thought that the gardens at the palace ought to be opened up, and people allowed to walk there. In London thousands of pounds were spent on the Royal Parks every year; a couple of hundred pounds would keep the Holyrood Gardens in order, and they would be a delight to thousands of people.

MR. CAPPER eventually explained that he was to deal with Holyrood Abbey as distinct from the palace, and showed, with the help of limelight illustrations, how fragmentary were the remains of the original building. He afterwards had thrown upon the screen pictures of a number of well-known ecclesiastical buildings in England, with the view of conveying to the audience some idea of the parts of the abbey church that have been swept away. In reference to the history of the church, he recalled the legend of King David and the stag, but pointed out that it was not till after the year 1400 that mention came to be made of it in connection with the foundation of the abbey. Mr. Capper subsequently spoke of the leading characteristics of the building from an architectural point of view, incidentally saying that he shared the hope of the Chairman, that the palace gardens would soon be open to the public; and, in concluding, he reminded the meeting that two districts of the city owed their names to the existence of the Church of Holyrood—the Grange, which came to us from one of the barns erected by the clergy of the abbey in ancient days for storing their tithes of corn: and Canonmills, so called because there was situate in the old days, on

the Water of Leith, a mill for the grinding of the corn of the Canons of Holyrood. The lecture was made the more interesting by reason of the series of beautiful views which were shown on the screen in illustration of the subject.

THOMAS ALVA EDISON, the electric wonder of the century, was born in Ohio on February 11th, 1847, of Dutch parents. At the age of fourteen he achieved a stroke of enterprise which the newspapers have often exploited. When the news came of the battle of Pittsburg Landing he was a newsboy on the Grand Trunk Railway, and he wheedled the telegraph operators into giving him the use of the bulletin boards at the various stations for announcing the news in advance; then he cajoled the editor of the *Free Press* out of one thousand copies of the paper to be paid for after being sold; and finally he persuaded the engineer of the train on which he started out to give him a few minutes' extra time at each station. The result was that every station along the route looked as if a riot were in progress; so big was the waiting crowd that the price of the papers went up to twenty-five cents a copy, and a small fortune was garnered in.

It was a short time after this that Edison came near burning up a train with his precocious scientific researches. He had gathered together a sort of laboratory in the car in which as newsboy he made his trips. The car was destitute of springs, and, like the "one-hoss shay" of immortal memory, was in a complete and consistent state of decay. The constant jolting dislodged the cork of a phosphorous bottle, hurling it violently to the ground and setting fire to the car. The flames were extinguished without much difficulty, but the wrath of the guard was less easily allayed. He was inclined to view Edison in the light of an unmitigated nuisance rather than in that of an interesting and incipient genius. The present crowning outrage gave him the revenge his soul had thirsted for so long, and in the twinkling of an eye our luckless hero found himself on the platform with his scientific gods raining about his ears. The boxing which the angry guard administered to the boy's head, before ejecting him, resulted in the deafness which has ever since afflicted him.

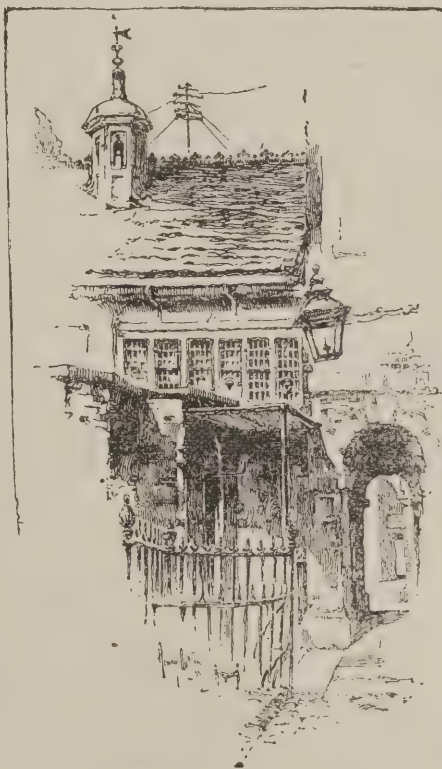
His next feat was to construct a telegraph line from the town of Port Huron to the railroad station, but about the time it was completed a courageous rescue of the child of the telegraph operator led to Edison's installation as an assistant in the office. Edison here started on the continuous upward career which is well known to the world, and some of the results of which are his automatic telegraph system (by which one thousand words a minute are sent over a wire from New York to Washington), the electro-motograph (out of which came the transmitter of the telephone), the megaphone (making audible six miles away the sound of cattle crunching grass), the aerophone, the phonograph, the incandescent light, &c.

HERE is Mr. Edison's own story concerning the discovery of the principle of the phonograph:—

"I discovered the principle by the merest accident," states Mr. Edison. "I was singing to the mouthpiece of a telephone, when the vibrations of my voice sent the fine steel point into my finger. That set me thinking. If I could record the action of the point, and send the point over the same surface afterward, I saw no reason why the thing should not talk. I tried the experiment first on a strip of telegraph paper, and found that the point made an alphabet. I shouted

the words 'Halloo! Halloo!' into the mouthpiece, ran the paper back over the steel point, and heard a faint 'Halloo! Halloo!' in return. I determined to make a machine that would work accurately, and gave my assistants instructions, telling them what I had discovered. They laughed at me. That's the whole story. The phonograph is the result of that pricking of a finger."

AN important case of considerable interest was heard the other day in the Clerkenwell County Court, by Judge Meadows White, Q.C. The New Imperial Investment Society sued Mr. Hilburn for £31, being the sum required to repair a house he occupied from them at New Malden. The defendant had no lease of the premises, but only a three years' agreement, and he paid £10 into court as the full value of any deterioration that might have occurred during his tenancy. When he left, the plaintiffs sent their surveyor to inspect the premises, and he prepared a specification which would cost £31. The defendant was then called upon to do the work, but he refused, and in his evidence he gave his reasons. In the first place, a good



CORNER OF BARNARD'S INN.

deal of the damage it was now sought to make him repair was caused by the inferior material originally employed, the plaster of the walls being simply mud. He further said that the holes in the ceilings were caused by rats, of which there were a great many in the house (upwards of forty being caught in one week), and by damp caused by defective waterpipes. His honour, in summing up the case to the jury, said the plaintiffs relied upon the following clause in the agreement: "The tenant agrees to keep and deliver up the premises on quitting in as good a state and condition as the same are now in." His honour directed the jury to put a reasonable construction upon these words. Had the tenancy only been for one year it could hardly mean that the paint should be renewed, the walls repapered, and the whole house put in exactly the same condition as it was when the tenancy commenced. The jury thought the £10 paid into court was sufficient, and his Honour gave judgment for that amount.

M. BOUTAN, of the Sarbonne, who is well known for his submarine explorations, has found a means of photographing the seas bed. Provided with a water-tight apparatus of his own construction, he tried at first with natural light, but an infinitely long exposure was necessary, and then it was only possible to obtain a negative in exceptionally calm weather. He then invented a lamp, a bottle filled with oxygen and surmounted by a glass bell in which burned a spirit lamp. Magnesium powder is projected on to the wick by an india-rubber spray producer, and the resultant burst of flame affords the light for an instantaneous exposure. The base of the machine is pierced with holes so that as the oxygen diminishes it is replaced by water, thus equalising the pressure without



MOSAIC FROM THE GREEK CHURCH BAYSWATER.

and within. This prepared and weighted, M. Boutan, in diver's dress, quits his boat in search of the picturesque. He has obtained some striking pictures at the bottom of a bay near Banyuls, at the mouth of a small stream. As soon as the beach sands are quitted, boundless meadows of seaweed are encountered, reaching to the breast of the submarine tourist and extending in a gentle slope to the invisible depths. The currents from the stream have ploughed this green lawn, tracing highways here and narrow paths there, carpeted with fine sand and minute shells. These Mediterranean boulevards have their flâneurs in the shape of large crabs, who strut along, all unmindful of the danger awaiting them, although they might take warning by the heap of carapaces at every turn of the road under every rock. If they approach these repairs too closely, a viscid arm is stretched forth which embraces and crushes them. It belongs to the polyp, which too awkward to catch the more agile-finned things, gluts its appetite with a perpetual feast of crab. These octopods abound, but luckily for the photographer, they are not large. Surprised in their retreat, they put themselves into a posture of defence, their tentacles outspread. Teased by a cane, they prefer flight to battle, and disappear awkwardly among the weeds, disturbing the lazy congers who are digesting heavily. A burst of sunshine extends the observer's field of view, and reveals shoals of sea-bream and mullet pasturing in the meadows. The boat shows like a patch of ink on the luminous ceiling. It is the moment for a negative. The first flash of the magnesium attracts crowds of fish, who sail around the explorer in astonishment, but not in fear. If he stretches out his hand to seize one, it moves out of reach of his arm, but no further. Photography, which has revealed the heavens, has now a new field. We shall, probably, soon have collections of submarine views in addition to those of mount and stream. But ingenuity will not stop there. It will not limit itself to the shallows that can be reached by the diver, but, doubtless, means will be found to send the submarine camera by itself into the depths to bring back for us pictures of that which the eye of man can never behold. M. Boutan has found new work for that invaluable handmaid of science—photography.

IN an article on the "Fortunes of Lambeth Palace," Mr. William Connor, Sydney, gives an interesting account of Lambeth Palace. "In 1648," he says, "it was put up for sale, and was purchased for the sum of £7,073 os. 8d. by Thomas Scot and Matthew Hardy, the former of whom was Cromwell's Secretary of State, and one of the Judges who had presided at the trial of Charles I., and who, it may be added, paid the penalty of his conduct on that occasion in 1660 with his head. The miscreant regicides no sooner obtained possession of the residence of the Archbishop of Canterbury than they proceeded to wreak their vengeance upon everything that offended their bigoted minds. The first object of their destructive hands was the noble hall, the work of Cluchite, which they pulled down, and the *materiale* of which they sold. As if to signalise the gross inconsistency which existed between their practice and their preaching, they had the audacity to convert the beautiful chapel into a dancing room, and finally completed their work of destruction (and it is to be hoped satisfied their "Godly zeal," by which we will in charity assume they were fired)



BY A. B. MITCHELL.

upon the tomb of the Venerable Archbishop Parker, which, because it stared them in the face and checked their mirth, they saw fit to shatter in a thousand pieces. Impelled by a ghoulis curiosity, these monsters of debauchery dug up and opened the leaden coffin. Cutting away the cere cloths, of which there were many folds, they exposed the corpse, which had not then seen corruption, and, after stripping it, conveyed it into an outhouse, and there buried it among the offal. It is satisfactory to record that in 1661, the year after Charles II. was restored to his throne, the wretch Hardy was ordered by the House of Lords to exhume the mortal remains of the Archbishop, and after they had been re-interred with befitting solemnity and honours, in the same chapel near the steps of the altar, to erect a handsome monument over it at his own cost and charge.

WHEN Lord Elgin removed Phidias's work from the Parthenon, a cry of horror went up from the entire cultured world, Byron—who, curiously enough, at one time lived next door to Lord Elgin, in the house now divided into

two, and occupied by Mr. Ernest Beckett, M.P., and Sir Algernon Borthwick—being the loudest in his abuse of what he called his lordship's "stone-shop." But, considering that at that time Athens was in the hands of the Turks, who had battered the Parthenon to pieces with their cannon, and were burning its marble to convert into lime; Lord Elgin was not such a Vandal as the world made out. After unheard of adventures, they were wrecked and fished up from the bottom of the sea. The Elgin marbles were eventually sold to the nation at a loss to Lord Elgin of some £16,000 or £20,000. Of late years there has been a foolish revival of the Vandal theory of our possession of these precious relics of the noblest period of Greek Art.

THIS winter's gales will long be remembered in England, but one in particular will be recalled most vividly on the Norfolk coast, where its full terrific force was experienced. Indeed, the whole country suffered, and Eccles especially so, for it has lost a cherished heirloom not to be adequately restored. The round steeple which has stood for so many years on the open beach, defying storm and sea, has gone at last. Hour after hour the hurricane beat without effect upon this venerable pile, but at last the old tower succumbed, and now it has fallen. Of all the erection but four or five feet alone remain, and the storm which has destroyed a part of the ancient building is also responsible for revealing other portions long hidden beneath the sand. The outlines of the southern aisle have been uncovered, and are now to be clearly distinguished. Eccles Church was dedicated to St. Mary some hundreds of years ago, but the sea has made tremendous inroads upon this coast, and the holy building, with the exception of its tower, was partly destroyed and buried as far back as 1605. The tower itself was circular at its base, octagonal at the summit, and about eighty feet in height. With it a famous sea-mark has disappeared.

THORESBY HALL, on the edge of Sherwood Forest, where Earl and Countess Manvers are entertaining a large party this week, is one of the most interesting of the stately homes that go to make up the Dnkeries. The present Elizabethan house is not indeed, ancient, having been built by Salvin early in the present century, but it occupies not unworthily a site that the Pierpoints first settled upon at the time of the Conquest. The ancient mansion must have been a splendid affair, for it is described as having window frames overlaid with gold, but this magnificence gave place to a very plain brick structure, the birth-place of Lady Mary Wortley Montagu, and in 1745 a fire destroyed the then existing edifice, making room for a nobler building erected by the late Duke of Kingston. One of his predecessors, known as "the good Earl of Kingston," met with a very remarkable fate. During the great rebellion he pursued the tactics familiarly described in America as "sitting on a rail." Upon Cromwell's pressing him to join the Round-heads, he exclaimed! "When I take arms with the King against the Parliament, or with the Parliament against the King, let a cannon ball divide me between them." A few weeks later he decided to cast in his lot with the Cavaliers, was taken prisoner by Lord Willoughby, and shipped off to Hull. Some of his own party attempting a rescue, brought a gun to bear upon the vessel, and at the first shot cut the luckless Earl in twain. The present Lord Manvers does not hesitate between two opinions. He is a staunch Conservative, and will keep both himself and the Empire undivided to the best of his ability.

THE name of Goodwood is very ancient and is supposed to be a corruption of the

Saxon name Godwine. The estate was purchased from the Compton family by the first Duke of Richmond in 1720. The modern



MOSAIC FROM THE GREEK CHURCH, BAYSWATER.

house is built on the site of an old gothic building, which was demolished in the early part of the eighteenth century. It consists of a front 160 feet in length, ornamented in the centre with a double colonnade, and terminating at either end with a round tower, from each of which a wing juts out at an obtuse angle. It was begun by Sir William Chambers, and added to by Wyatt, the architect of Windsor Castle, under the orders of the third duke, who intended originally to complete the hexagon, but only succeeded in finishing the three sides now existing. The whole building is composed of stone flints of the neatest masonry. The stables, which were designed by the architect of Somerset House, are quadrangular in form and are remarkable for their size, the front measuring 213 feet by 146 feet.

MR. T. RIDYARD ROSCOE, C.E., of Luton, has been appointed, by a large majority of votes, surveyor and engineer to the Vestry of St. Leonard, Shoreditch, at a commencing salary of £300 per annum. Mr. Ridyard Roscoe has held the position of borough engineer and surveyor to the Town Council of Luton for the last three years, and previously he was engaged as assistant surveyor to the local authorities at Islington, Hammer-smith and Ramsgate. In 1882-1883 he was employed by Mr. (now Sir) E. Leader Williams, M.I.C.E., upon the engineering staff of the Manchester Ship Canal.

IT was the same expensive third Duke who built Molecombe in 1761, and planted the Lebanon cedars which are still the chief features of the fine park, though only 150 now remain. The most striking object of the interior is a colonnade of six pillars of light grey granite which adorns the entrance hall. The walls of the drawing-room are hung with Gobelin tapestry, representing the adventures of Don Quixote. The house contains a whole gallery of historical portraits, including Charles I. and Henrietta Maria by Vandyck, Charles II. by Lely, Louise de Keroual and Charles, first Duke of Richmond, by Kneller. The most remarkable picture is one in the billiard room, which was brought from the Castle of Aubigny. It contains a complete representation of all the incidents in the murder of the Earl of Darnley. The artist is unknown, but the picture is said to have been painted in the reign of James I., and finished in four months.

THE town council of Bury, Lancashire, has decided, after a long discussion, to empower a committee to obtain plans for the erection of a municipal lodging house capable of accommodating 300 persons. Intending competitors should visit Lord Rowton's model institution at Vauxhall, the finest and most successful of its kind in England.



PERSPECTIVE VIEW OF ALL HALLOWS, FORMERLY KNOWN AS THE CHURCH OF THE GOOD SHEPHERD.

JAMES BROOKS SONS, ARCHITECTS.

(See Page 19.)

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

THE EDITOR does not hold himself responsible for the opinions of Correspondents, whose communications should be brief and plainly written on one side of the paper.

The BUILDERS' JOURNAL goes to press on Monday at 6 p.m. All matter must reach the Editor by the first post on Friday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments. Subscribers in London or the Suburbs receive their copies by the first post delivery on the day of publication.

Advertising.

CHARGES FOR ADVERTISEMENTS.

SITUATIONS WANTED.

Per line (about 10 words), Sixpence.

Minimum charge, Eighteenpence.

Three Insertions for the price of Two.

SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS, TRADE AND GENERAL ADVERTISEMENTS.

Four lines (about 40 words), Three Shillings.

Each additional line, Sixpence.

Prepayment in the above Advertisements is absolutely necessary.

The charge for Paragraph Advertisements on the Front Page is Fifteen Shillings an inch, single column. Minimum charge, Five Shillings. Paragraph Advertisements on ordinary page, single column, Seven Shillings and Sixpence per inch.

MANUFACTURERS' ANNOUNCEMENTS ON ORDINARY PAGES.

Per Page, Single Insertion, Eight Guineas.

Discounts for series on application to the Manager, who will make Special Contracts for Announcements on Back and Leader Pages and positions facing matter.

NOTICE.—Advertisements for current week's issue are received up to last post on Saturday. Alterations in standing Advertisements must be made before 6 p.m. on Fridays.

Advertisers in THE BUILDERS' JOURNAL may have their replies addressed to the Manager's Office, free of charge, and may have them forwarded if addressed envelopes sufficiently stamped are sent.

Reading Cases, lettered in gold, may be had from the Manager. Price, One Shilling.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

THE enterprising Corporation of Blackpool have decided to purchase, at a cost of £32,000, three large estates to the north of Claremont Park, for the purpose of constructing a new promenade and carriage drive, with a view to adding an extensive suburb to the town.

THE Hammersmith Vestry have under consideration a proposal to construct a new lock at Battersea. It is said, that since the construction of the Richmond Lock and the erection of the Tower Bridge, the flow of the river has decreased so much that navigation is rendered almost impossible near Hammersmith.

The Builders' Journal.

MEN WHO BUILD.

No. 2.

MR. THOMAS COLLCUTT.



LOOMSBURY has become, by the natural evolution of things, an architectural haunt, but it has been left to Thomas Colcutt to build himself a habitation which does credit to his own art, and to a district wallowing in the refinement of stucco, and an abundance of those alarming classic details which are peculiar to the Italiano Portland Cemento period of London architecture. Mr. Colcutt pulled down one abomination in Bloomsbury Square and built up a delightful home, albeit the wretched London atmosphere has already played sad havoc with much of the rubber work, to the porch and string courses of his house.

Thomas Colcutt first entered an architect's office where he was "bound apprentice" to one, Armstrong, of London, a gentleman who—however clever he might have been—has been eclipsed by his pupil. He then journeyed to the office of Messrs. Miles & Murgatroyd—and, lastly, he went over to the ever lamented G. E. Street, and imbibed the Gothic feeling, which, curious to notice, has had very little to do with his purely architectural work, although for years it influenced all the furniture designing which he did. In 1869, Mr. Colcutt commenced his practice in partnership with a Mr. Woodzell, and this partnership was responsible for the Blackburn Free Library, a fine work. The partnership, however, existed but for three years, and then the senior member started on that series of delicate and reputed renaissance studies, the first of which was the Wakefield Town Hall, which have brought him renown and fortune. Mr. Colcutt has carefully journeyed, sketch book in

hand, through France and Normandy, Belgium and Holland, but particularly studying the Italian Renaissance that one finds in and around Orleans. And under this influence all Mr. Colcutt's later work has been moulded. For years he worked assiduously designing furniture for Messrs. Collinson and Lock, first in the Gothic methods which were fostered by Street, then gradually becoming more and more infatuated with the best of the French periods. This is a branch

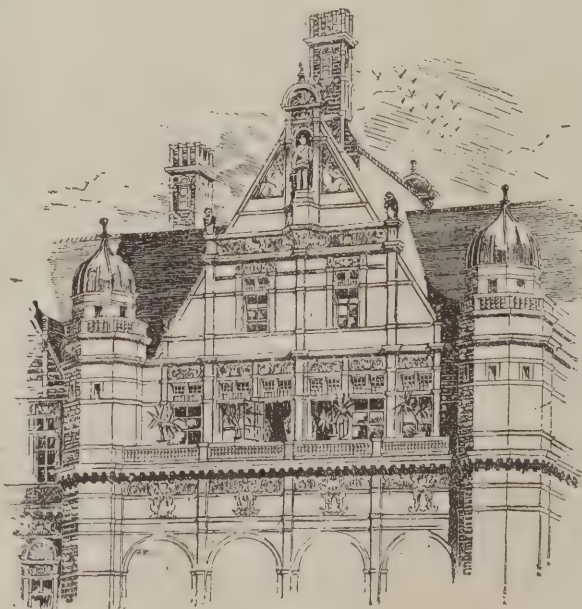


of design which Mr. Colcutt has always excelled in, and to this day he is responsible for the internal fitting up of the P. & O. liners, which, travellers will remember, are extremely ornamental in their saloon and stair-case fittings.

During more recent years, Mr. Colcutt has been responsible for the elevation and internal decoration of the new Palace Theatre, Mr. D'Oyly Carte's fine house in Shaftesbury Avenue. The fine front of the P. & O. Co.'s

Offices in Leadenhall Street; the City Bank on Ludgate Hill, one of the most reputed and delightful pieces of design in the whole of the City; the new King's Hall of the Holborn Restaurant; and, lastly, the Imperial Institute, which, from its magnitude, may by many be looked upon as the masterpiece of Thomas Colcutt, but of that the Architect himself may have something to say.

"Perhaps," he suggests naively, "I might like to pull it down and build it up again," and, although there appears to be little seriousness in the suggestion, it is the opinion of many that had more time been given to the Architect to mature his scheme and to elaborate his design, he would have been less ornate in his detail and would have put a deal more serious effect and grandeur into the work. One thing Thomas Colcutt is extremely anxious should be remembered, is that internally nothing hardly has been completed owing to the want of funds. The whole



UPPER PART OF EAST AND WEST WINGS.
IMPERIAL INSTITUTE.

cheme of completion depends upon colour decoration, so that it is impossible to be fair in criticism until the artist has had the opportunity of adding the wonderful effects of colour to his building. Mr. Collcutt's own description of this picturesque pile is worth giving. "The prevailing style of the building is a free rendering of the Renaissance, and as the amplitude of moulding and the abundance of Arabesque carvings show a decided relationship to early Italian Renaissance, it may be said that the Imperial Institute affords a characteristic example of the gradual movement towards the Renaissance, as practiced in this country during the last two decades."

A little item of Mr. Collcutt's work is a curious instance of how a really unimportant fact will sometimes give more honour to a man than his greatest efforts. The fame of Thomas Collcutt will never fade so long as his remarkable "front" in Fleet Street is able to show anything of its charms from behind the damnable advertisement boards of Lockhart's Cocoa, which at present smother it. The history of this little front is interesting. The building was formerly the show-rooms of Collinson & Lock, for whom at that time Mr. Collcutt was designing furniture. The front was too good to pull down, but too hideous to keep standing, and so Collcutt determined to introduce a few strings and cornices in red rubbers and cover the panels with Portland cement. It was in the depth of winter, twenty years ago, that the work was begun. The scaffold was lined round with canvas, and braziers were kept continually burning behind the screens night and day, to keep out the frost. A certain young Artist—now gone to America—named Wilberfoss, who at the time was designing wall papers for Jefferys and other makers, undertook to "do something" to the bald and unconvincing panels of cement, and so, with his own hands and with a few moulding tools which he made for the purpose, he moulded that cement and left it as we see it now. When the whole had set and the braziers and the canvas screens were removed, London had become, in a few weeks, the possessor of as fine a piece of honest work, and as charming a London front, as under corresponding circumstances it is ever likely to possess.

Seated in a particularly charming room, in Bloomsbury Square, and which has the touches of an Architect's hand upon it, from the skirting to the cornices up above, you are able to indulge in a little cursory chat about the date books of the past and the aspirations of the future. Mr. Collcutt is not prepared to go very deeply into the question of professional examinations, but as one of the Institute Examiners in the "Art" section he frankly confesses that the Examinations are after all proof of very little. The great

objection to the whole thing is the custom of cramming, and as he very rightly remarks, the more a brain is crammed the quicker does its knowledge evaporate. He gives you instances in which men have creditably passed the Institute Examination who would have been mercilessly plucked had they again attempted the same examination three weeks later. Mr. Collcutt, however, ridicules the notion that an Architect should be an artist and nothing else. The more practical knowledge a man has, the more likely are his

inlay is remarkably fine, and the original locks of beaten iron are still in position. Beside a Gothic cabinet, an example of his own design of 20 years ago, there stands a beautiful muniment chest, massively inlaid with ivory, which the owner picked up upon one of his Italian travels. A few specimens of beautiful pottery ware, of which he is an enlightened connoisseur, evidence his appreciation of the plastic arts. But those of us who have seen some of his internal decorations and fittings, know what a mastery his pencil has over this

department of an Architect's Art. He is at the present moment engaged upon an important restoration of a fourteenth century country house. With his clerk of the works he is personally superintending the work without the aid of the contractor, and the delight with which he gives you a few of its details, and the interest you know he is taking in the restoration proves that, in Thomas Collcutt, English Architecture possesses a practitioner who brings the utmost refinement to bear upon every atom of work his pencil produces, and there are those of whom so much could not with honesty be said.

A MOVEMENT has been on foot for some time past to establish public swimming-baths for Sittingbourne, but the chief obstacle to the adoption of any scheme has been the question of finance. The difficulty has, however, been solved by an offer from a firm of manufacturers in the town, to give £1,000 towards the scheme on the condition that the baths, when complete, shall be handed over to the Urban District Council to be maintained by that authority for the benefit of the public. It is proposed to utilise the baths as a gymnasium as well.

MR. DE RUTZEN decided, at the Westminster Police Court, in the case of the erection beyond the general line of frontage at the Westminster Palace Hotel, Victoria Street—the construction without the consent in writing of the London County Council of a conservatory over the portico—that the structure was illegal, and must come down. Mr. Chilvers prosecuted for the County Council, and obtained an order in their favour with costs.

H. M. OFFICE of Works has purchased a vacant plot of land, facing Baldwin Street, from the Bristol City Council for £4,220. The site is required for the erection of new Bankruptcy and Inland Revenue Offices.

To clear a site for the approaches to the Blackwall Tunnel, it has been necessary to pull down a large number of buildings, especially on the north side of the river, where the approach begins in the East India Dock Road, opposite the principal gate of the Import Dock. The claims for land, buildings, &c., amounted to £432,000, but they have been settled for £317,000. At certain points near the river there will be spiral staircases, in shafts, so that the people in the neighbourhood may enter or leave the tunnel without going along the incline to the ends of the approaches.



THE QUEEN'S TOWER—IMPERIAL INSTITUTE.

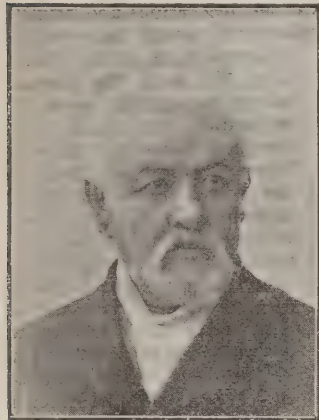
artistic faculties to be elevated; and the better acquaintance he has with the workshop and the scaffold, the nobler will be his buildings and his reputation. In his own room, in Bloomsbury Square, and in his country house, Mr. Collcutt is surrounded with the evidences of a cultured brain. There is a superb marqueterie cabinet of enormous proportions which occupies one whole side of the room. It was brought from the monastery of Rottweil, near Ulm, in 1526, where it was made by Capuchin monks. The

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

"COUNT me against Architectural Confectionery and fidgety facades," was what Walter Crane begged in his telegram of excuse for non-attendance at the last meeting of the Institute.

Before the papers upon "Simplicity in Architecture"

were read it was announced by the President, Mr. F. C. Penrose, M.A., who occupied the chair, that the Council had selected the name of Mr. James Brooks for submission to Her Majesty as a fit and proper recipient of the Royal Gold Medal of the Institute, for his works as an architect.



MR. JAMES BROOKS.

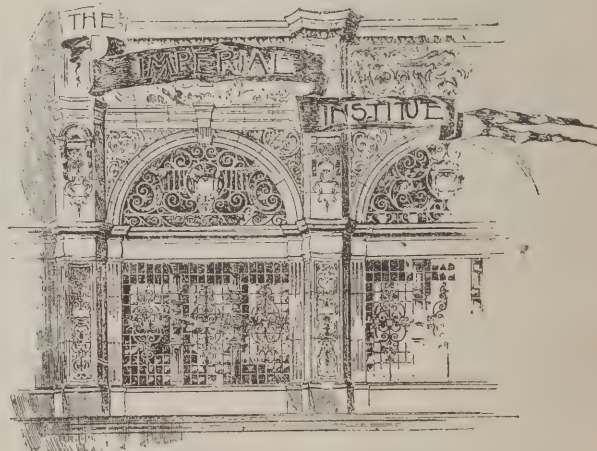
Mr. Halsey R. Ricardo first read his paper and opened his remarks by quoting Ruskin: "Architecture is the art which so disposes and adorns the edifices raised by man, for whatsoever uses, that the sight of them may contribute to his mental health, power, and pleasure." He stated that "all architecture proposes an effect on the human mind, not merely a service to the human frame." And we knew that these words were true. This effect might be the expression of the individuality of the architect, or the owner of the building, or a fusion of their associated individualities. Mainly it was the architect who spoke through his work; the building-owner set him the conditions, but their resolution was his occupation. In architecture, man's individuality was swiftly discernible. Let not a man think to conceal his identity; a moulding betrayed him; the preparation for a cornice or the stopping of a string-course proclaimed him. Living architecture was that which answered the requirements of the day. The requirements might be modest and sensible, and then the architecture would be beautiful and strong; they might be affected and individual, and then the architecture would be so far paralysed; they might be extravagant and vulgar, and the architecture would be violent and vulgar in response. Early in the century we threw off the weight of 300 years, and masquerading as Perpendicular Goths, went about our business of the day. Then some very superior people shook off a couple more centuries, and attempted to play at being knights out of armour. Time, the policeman, moved us on, and we proceeded to play just round the corner. The 150 years or so seemed a bridgeable difference, and Christopher Wren, a good serviceable stock on which we could graft what of Italian, Dutch, German, or other, we might choose. And at this point we were now arrived. The whole past was a vast treasury for us to draw upon. But this wide range of choice had been attained with the loss of tradition. And this want of traditional support had had the result of clogging and obscuring the architect's mind with detail. The traditional methods had been obliterated; but there was a strong tendency to adopt the opinion that detail would pull one through, even if one could not get the masses right. A short while ago the Terrace in High Street, Kensington, came into the hands of the builder. The buildings, low and out of date, stood back from the road, and their reticence did something to counteract the unpleasant constricted feeling that one had in the High Street. The houses were pulled down, and a large block erected on the advanced frontage. The ground floor built in the "practical" style—brick party-walls, some steel knitting needles, and some sheets of plate-glass; above this, four

stories of domestic architecture in the style of "the man in the street." The building was curiously illustrative of the temper of the day. It was devoid of proportion, and covered with knick-knacks and the general frippery of architectural ornamentation. Across the road, and forming its north side, were two blocks of buildings, called Lower Phillimore Place. They were not conspicuous examples of good proportion, but they were simple, quiet, and refined. They looked with scorn at the blazing vulgarity of the new corner opposite. Seventy years ago we should have called them builders' houses of a good type; to-day we call them dull. Buildings, like the drama, should be pregnant—condensed—in their ornamentation. Simplicity in architecture meant good art in architecture, and good art in architecture meant perfect adaptation to the circumstances surrounding it. Good art was, therefore, pre-eminently practical. All this welter of indiscriminate ornament was not practical.

Mr. Basil Champneys said he had been asked to speak on the subject of Simplicity in the Art of Architecture, specially with reference to churches and country houses; though the principle of simplicity was really universally applicable to all architectural art whatever. There were two positions which it was desirable that we should establish in the first instance: the one that simplicity was a note of the highest art everywhere and in all its branches; and the other, that it was specially characteristic of the English genius. In the fourteenth century, when foreign art was developing into the vagaries of the Flamboyant in France and the neighbouring countries, and in Germany into a variety of ingenious extravagancies, in England the invention of the Perpendicular held eccentricity in check and resulted in work which erred as often on the side of severity as of exuberance. A work such as the Chapel of King's College, Cambridge, with all its elaboration and extreme development of constructional art in its vaulting, was still essentially one of the simplest, as it was one of the grandest, of Mediæval buildings. If such a work as Henry VII.'s chapel be quoted against him, he should answer that, beautiful as it was, it showed the note of decadence, and was evidence only of the exuberance into which art might run when the restraint of a wholesome traditional principle was removed. But, putting aside these more conspicuous examples, one could appeal with even greater confidence to the vernacular examples of ecclesiastical art, to the dignified modesty of thousands of village churches of no special fame, all of which, almost without exception, showed unobtrusively some note of true inventiveness and some degree of poetic charm. An idea was unfortunately prevalent that simplicity in art was usually to be found in an inverse ratio to inventiveness. He believed that the exact opposite was true, and that if necessity was the mother of invention, simplicity was daughter of inventiveness. From first to last the law held good, that every building, to be a work of art, must originate in one central idea—what the French called the "*idée mère*"; that to this idea all that the inventive powers might evolve must be strictly subordinated, and that it was better to apparently fail in inventiveness than actually to fail in unity and keeping. The popular demand for so-called originality was perhaps the most dangerous influence against which the art of the time had to struggle; nor was it more noxious than absolutely unreasonable. True inventiveness was always unconscious; nor could anyone by taking thought increase his originality one whit more than he could add a cubit to his stature. No art had ever progressed by jerks; healthy progress had always been smooth, gradual, and tentatively modest; and this was especially true of architecture, which could never be largely divorced from precedent, and relied so largely for its effect on associated ideas. Style had been defined by someone

as "having plenty to say." It would be more correct to say that one of the essential conditions for writing a good style was to have plenty of material; perhaps another condition might be not to try to say too much. These remarks had a very direct application to the question of architectural simplicity. Architecture, of all the arts, was the most firmly based on the practical. In the design of every building the primary problem was to fulfil certain definite practical requirements according to established constructional laws, and it was on the spirit in which such problems were met that style in architecture mainly depended. If they were met honestly and simply, the thing to be done being held primarily in view and sound laws of construction loyally obeyed, at least the conditions of good architecture were present. In architecture, unity and simplicity were so closely allied as to be almost interchangeable terms. But the only condition on which true and complete unity in architecture could be obtained was that the design should have been originally conceived as one complete whole. One often came upon proposals which seemed to imply that a design might be taken to pieces, and that the elevation was to follow a plan previously and independently made. This was a dangerous heresy. A plan was a good plan if, fulfilling the primary practical requirements of the scheme, it involved by legitimate construction a building both internally and externally good. Unity of effect involved and implied unity of conception.

Mr. Francis J. C. Penrose, in a short paper on



ORNAMENTAL SCREEN, MAIN ENTRANCE.

the same subject (read by Mr. Caröe) said that in an age of such varied and complicated wants as the present, the primitive simplicity of our Norman and Saxon ancestors could not be maintained, nor would it be, to that extent, desirable. Every historic style of architecture had passed through the phases of its first uneducated dawn, then its meridian excellence, and thence had sunk to a more or less complete state of decadence. There has been a rude but grand kind of simplicity in the first period; then the well-ordered and chastened simplicity of the culminating stage, and invariably a loss of this quality at the close. But, nevertheless, in England at least, a resolute stand was in some very important instances made against the prevailing tendency to complication. Witness the works of William of Wykeham, in Winchester Cathedral and elsewhere, and of the Architect, whoever he was, who built King's College Chapel. A noble stand was also made against the degeneracy of the Renaissance in England by Inigo Jones and Sir Christopher Wren, and in France by Claude Perrault in the Eastern front of the Louvre. Besides these examples of stemming the adverse current, we had encouragement derived from the sequence of the works of nature. Consider the gradation which we found between the pendant violet and cowslip of spring, the severe concentric majesty of the summer rose, and the radiating flowers of autumn; but none of these, with all their variation of character, could we charge with want of simplicity. The examples and analogy above given ought to encourage us to feel

assured that even though a tendency adverse to simplicity had become prevalent, it was quite capable of being corrected. Let us, therefore, endeavour to establish the means by which it might be done. A prime essential was the rule that no particle of ornament, whether decoration be abundant or scanty, should be used without a definite aim. Let us next consider the advantage of a well-ordered and simple plan. One of the greatest charms in viewing a building arose from the exercise of the mind, when the orthographic aspect was distorted by perspective, in recovering the true shape or plan from the image presented to the eye. In a well-balanced architectural composition, this process could be gone through satisfactorily before the mind was fatigued by it. As to the quality of simplicity in the orthographic aspect, the first principle should be the expression of one central idea connected with the purpose of the building; and any subordinate compositions should have reference to the main idea, and by far the larger part of the ornamentation used should be grouped in connection with it. It might be instructive to point out how very little some of the finest works of architecture owe to complexity of structure and ornament. In the Propylæa there was no ornamental carving whatever. Our two noblest cathedral fronts, Lincoln and Peterborough, owed their imposing and beautiful effect to simple forms. The Sainte Chapelle looked far more impressive when he first saw it, with the windows and floor quite plain, than after its modern elaboration with paint, gilding, and tiles. Taking for granted the desire to work out a design in due simplicity, the method which had occurred to him was something of the following nature. Having well thought out the capabilities of the plan, commence the elevation on quite a small scale—such, for instance, as the object would appear at a distance equal to ten or twelve times the height. On so small a scale none but the principal features would be distinct. Sketch these into shape before any enlargement of scale was thought of. Then adopt scales representing the building at nearer distances by steps, until the scale was sufficiently large to exhibit roughly all the detail that might seem desirable. When this had been discussed and got into shape it would be desirable to leave the elevation alone for such interval as might be wanted to attend to some other of the requirements of the building, and then, with a fresh eye, return to the elevations and compare the last enlarged sketching with the first small scale drafts, and carefully consider whether in the subsequent elaboration the design had at all lost its primitive simplicity, and, if so, cut out all excrescences which might have caused such departure. There was ample room for true originality by the exercise of the restraint and the condensation of thought referred to above, and ample scope for its exhibition by skilful planning and grouping, so that its merit might at once be evident to any thoughtful observer when comparing any such work with the florid unmeaning designs, of which we had so many, worthy of the speculative builder, and lead him to say, "This seems to be the work of an architect."

Mr. H. H. Statham, the editor of *The Builder*, proposed a vote of thanks to the President and to the other readers of the papers of the evening. Having regard to the great majority of the buildings which have been hurried on in the present day, Mr. Statham considered they were characterised by an exuberance of ill-thought-out ornament, which he was afraid was to some extent due to the increasing prevalence of the system of competition, which almost invariably led to a desire to produce a design that should attract attention before anything else. At the same time, it was of no particular use that he, who opened the discussion, should agree with everything that had been said. He thought there were points where more was meant than met the ear, and he should like to suggest another side to the question. He believed that the more thoughtful minority of the architects, or some of them, had been perhaps driven to the opposite extreme from florid architecture,

and were rather in danger of drifting into what might be termed an affectation of simplicity. Before bringing forward one particular instance of this, he would ask, in the first place, were the critics altogether consistent themselves? They were wont to consider thoroughfares like the old Georgian streets as dull, but they were



AN INTERIOR DOORWAY—IMPERIAL INSTITUTE.

now told that it was stupid to have such an opinion. Mr. Ricardo had mentioned an instance in Lower Phillimore Place, where there was much more sensible architecture on one side than in the new buildings opposite. He knew an old Georgian street in which were red-brick houses with no ornament of any kind, but with a cement string carried from one end to the other. An architect came and made a new front to one of these houses, putting in gables at the top, and a very big window with plaster decoration over it. He was so anxious to obtain curves that he put a bow-window in the ground story by tucking the bow back to the inside of the walls. That was on the south side of Great George Street, and the architect was his friend Mr. Ricardo. He (the speaker)



PRINCIPAL CORRIDOR—IMPERIAL INSTITUTE.

was not shocked at that in the least; on the contrary, every time he passed "it contributed to his mental health, power, and pleasure." It was putting something very interesting and picturesque into that which he maintained was

a very dull street. At the same time he did not see how Mr. Ricardo's practice squared with his preaching.

Mr. Alma Tadema, Mr. William Young, Mr. Robson and Mr. William White also spoke.

Of the £100,000 required for the decoration of St. Paul's Cathedral, £20,000 has already been promised.

THE Inspector of the Local Government Board held an inquiry with reference to the application of the Corporation of Warrington, to borrow money for the purpose of widening Bridge Street from Friars Gate to Rylands Street. The Town Clerk and Borough Surveyor stated that the estimated cost was £31,189, but a resale of land and materials was estimated to realise £8,235, so that the net cost would be £22,954. There was no opposition to the scheme.

THE Leeds Corporate Property Committee have under consideration plans, prepared by Mr. Micklethwaite, for providing a museum, entrance lodge and ladies' cloak room at Kirkstall Abbey, at an estimated cost of £2,250.

MR. R. C. WHITELEGG, Architect, of Manchester, has taken in partnership a Mr. R. E. Whittaker. The style of the firm will in future be "Whitelegg & Whittaker."

THE Greenock School Board have invited ten architects to send in plans in competition for a school to accommodate 1,000 children, and the cost is strictly limited to £10,000.

THE piece of land adjoining Shepherd's Bush railway station, which was presented some time ago by the Ecclesiastical Commissioners to the Library Commissioners of Hammersmith, still remaining vacant, a gentleman has offered to give anonymously the amount necessary for the new buildings, providing that the ratepayers will arrange for their maintenance. It is proposed to again take a poll of the parish. The new library would cost, it is estimated, between £6,000 and £7,000.

OUT of 72 applicants, Mr. Colin G. Mitchell, late Surveyor to the Tonbridge Local Board, has been selected by the Sunbury District Council as their Surveyor and Inspector of Nuisances.

THE members of the Royal Scottish Academy have just filled vacancies in their ranks by the selecting of two well-known Associates of the body—Mr. Charles Martin Hardie and Mr. George Whittan Johnstone. The former has distinguished himself by limning incidents connected with the lives and works of Scott and Burns. He has also made a special feature of depicting incidents in the early youth of Mary Queen of Scots.

MR. GEORGE WHITTAN JOHNSTONE, the other new Royal Scottish Academician, hails from the same region as his distinguished countryman, Mr. Barrie. He has been an Associate twelve years. Mr. Johnstone has made a special feature of Scottish landscapes, and some of his best work relates to scenes near his native place. Mr. Johnstone is also a member of the Royal Scottish Water-Colour Society, and his pictures figure conspicuously in their exhibitions.

MR. JOSEPH J. GOODE has just been appointed Surveyor to the Taunton District Highway Board and Rural District Council.

THE Liverpool City Council have accepted the tender of Messrs. J. Patterson & Son for the new library and technical school, at £10,399.

THE ship-building yard of Messrs. Mackie & Thompson, Glasgow, was destroyed by fire on the morning of the 15th. The damage is estimated at £8,000.

ALL the Lurgan schools are to be closed in consequence of the serious outbreak of diphtheria. Over 100 children have died from the effects of drinking the town water.

ON OBSERVATION.

BY LEONARD STOKES, F.R.I.B.A.

(Continued from page 13.)

I think, after all, this we may safely say—that observation is the principal factor in the training of an Architect. And now as to his clients—if he ever gets any—well, here again, observation is the one thing needful, for a good Architect should always know his client almost as well as he knows his building, otherwise how can he hope to come well out of the enterprise. Some clients understand drawings, know exactly what they want, and like to get it; others neither understand drawings, know what they want, nor are they satisfied when they get it. Some clients—and these are in the majority—always expect to get just twice as much for their money as is represented by its market value; others are not satisfied unless everything they have is gorgeous and expensive, refinement and repose not counting with them. Some clients, again, have plenty of money and won't spend it; while others have none but will. Some clients always think they are being swindled by an Architect, but the same men will—without hesitation—follow the advice of a horse dealer. Some clients know everything, while others ask perplexing questions upon every conceivable subject under the sun, and what is more, expect an answer. These clients are comparatively harmless if blessed with short memories, but if not—and in weariness you sometimes answer at random—then your troubles begin. Some clients are ladies, some gentlemen, some women, some men, some honest, some not. Some are easy to deal with, some are difficult. Some pleasant, some disagreeable. Some one is glad to see, and others one hopes never to meet again. Some very troublesome, others most delightful. Some the greatest help to one, others just the reverse. Some clients think they buy you body and soul for 5% or a pig-stye, while others are surprised to find that any drawings are necessary at all. In fact, just as there are no rules that can be applied to architecture, so there are no rules—not even the two-foot one—that can be applied to clients, each one must be treated on his own merits—if he has any.

Observation then must be carefully applied to the client, and his little eccentricities studied for his own benefit. The client who really knows what he wants should get it, and every effort should be taken to meet his views, provided they are reasonable; but directly a client asks you to do something that you do not approve of, then protest quietly but firmly, and if he insists then, after due consideration, either proceed under a written protest or decline the work altogether, according to circumstances. But this must not be done hastily, as I have sometimes found from experience that what at first seemed unreasonable and impossible turned out after a little manipulation to be quite workable or even an improvement upon my own ideas. The clients, however, who don't quite know what they want and don't understand drawings, but won't admit it, are often very trying. At first everything is *charming*, but as the work proceeds you will find that they expected everything to be quite different—much more this, less that, and not quite the other. With such the only thing I think is to keep quietly on doing what you feel to be the best for the work itself. With the clients who expect more than their money will honestly buy I should advise caution. They must either be brought to expect less or to pay more, and it is not always easy to know which to try and persuade them to do; but whatever you do be honest with them, and tell them from the first what they have to be prepared for. In some cases they will “go” the extra money, and then all may be well; in others their requirements will be reduced to meet their purse, but, above all things, don't try by scamping to produce what will in the end be only a discredit to yourself and no satisfaction to your client; let your work, at any rate, be honest building. The gorgeous client is not so often met with, at any rate down south in these bad times, but when found his costly proclivities can generally be directed into the right channel after a little observation. Your wealthy client, who is stingy, should have lessons on the cheapness of really

good work rubbed into him, and the open-handed and would-be bankrupt must be restrained. The client who expects you to swindle him must not be gratified. The knowing ones must be given plenty of rope, and the curious gratified as long as your knowledge and patience will hold out. The ladies and gentlemen will turn out pleasant friends, and will help to make life worth living. The men and women will have their interesting side. Your clients will, I hope, for your own sake, all be honest, but such is not always the case, I fear. Under any circumstances observation will not be thrown away, as a little knowledge of character and human nature, a little tact and worldly wisdom will often help you through a tight place, when disregard of them would strand you hopelessly.

Touting for work is an objectionable and degrading habit, yet one must not sit too tight or no work at all will come our way. I don't think there is any harm whatever in letting it be known quietly among your friends that you are quite prepared to do any work there may be going; but don't show yourself too anxious, and, above all, don't try to cut out another architect. If you had bricks to sell I should not so much object, but amongst architects there should be a better feeling. It is unfortunately the case, however, that the pushing young man gets the work and the retiring one does not, quite irrespective of their respective merits. Kissing goes by favour all the world over, and architects are no exception to the general rule. Ladies are capricious and uncertain, and so are clients, but let us hope that better times are coming, and that a little more discrimination may be shown in time to come by clients in “the placing of their orders.”

What we should charge our client is often a question not easy to decide. We should certainly never swindle him, at the same time we are often almost driven into swindling ourselves by our system of payment on commission, for five per cent. is anything but a “living wage” in cases where the job turns out a tiresome or difficult one. As far as my observation goes, I must confess, I do not like the custom, and yet the difficulty is to hit upon a better one. If only we could get rid of the trades union kind of idea of the whole thing, and get the British Public to realize that one architect is not necessarily quite as bad as another, we should have done something. Why should we not have our 6 and 7 per cent. men as well as 5 per cent., if we must be paid by percentage? It may be just possible, with care, to stock a shop—or bazaar, I think the correct name is—with articles to be all sold at the uniform price of 6d. each, as we sometimes see done, but that is about the only precedent I can find. Why, therefore, should we turn our Architectural societies into 5 per cent. bazaars? Personally, I much prefer the good old custom of arranging things so that some discrimination is discernible—e.g., all this row, 5 per cent.; extra quality, 6½ per cent.; very cheap, 3½ per cent.; slightly damaged 2½ per cent., and so on. You may think I am joking, but I am not. What does your observation tell you? If I am honestly worth 5 per cent., then Norman Shaw should be put on another row, but if Norman Shaw is only worth 5 per cent., then I say—and it is not mere cheap humility—that I should certainly be slightly reduced in price. Has our enlightened high art public next to no observation?

This is a question easy to ask, but not so easy to answer. Our sisters, our cousins and our aunts don't take long to find out where they can get a good bonnet—and they know, too, only too well, not to look in one of your all-one-price bazaars, having recognised that a good hat can only be got from a good maker, for, apart from all question of materials, there is a style about a good hat, and it must be paid for—sooner or later. Now I fear our uncles and our brothers have not this discriminating faculty even for hats, which is a pity, for if they had it for hats, it might spread in time to their ties and trousers, and after a generation or two even to their houses. Want of appreciation for the suitable and simple even in dress is a great misfortune, as it is, as a rule, simply the indication of a want of appreciation for many other things. Observation, then, will enable you to judge your client by his tie to

some extent, and a careful study of his trousers, not forgetting the proverbial depth of their pockets, may help you even further.

But to return for a moment to the question of what to charge our clients and how to charge it them. In the first place I should like to insist upon my point that there are qualities in architects as in other men, therefore I think there should be prices to correspond—fix your minimum price if you will, but for heaven's sake do not reduce us all to that one dead level, as it has this melancholy result, it tends to reduce our work also to a common and not too high a level, and I will tell you how. Take a man with a goodish practice, inclined to do work rather better than the average, what happens as he finds himself going up the ladder of fame and fortune? First, he overworks himself, and that is good for neither himself nor his work; but let that pass, it is the next stage that I object to, which is, the neglect of his work, for if a man has more than he can honestly manage to do, he must neglect some part of it. Thoughtless, slipshod work—perhaps even the work of another—is the result, and, instead of improving as time goes on, his work steadily deteriorates. But he has become the fashion, and work still comes in, and in order to live up to our nineteenth century ideas he fills his pockets at the rate of five per cent. on a large practice, and does what he can with his conscience. Now, if instead of doing this he were to put up his fees, it would enable him to live reasonably well upon less work; he could then decline to do work he did not feel drawn to, and confine himself to congenial subjects, which he would then have time to think out properly, with greater advantage to the work, and with greater credit to both his client and himself.

I candidly confess I don't quite know what I should substitute for the percentage system, but some form of piece-work seems to me the best solution of the difficulty, and, at any rate, it would free us from that hateful suggestion that we at times involve our clients in “extras” simply for the pleasure of receiving our commission on them. If, however, the percentage system must perforce remain, then, at any rate, let us have a higher rate for the good men than for the bad, and for the reason I have given you, if for no other.

And now for the young man's work—when he does any. And as I have just been holding forth to him on the subjects of clients, let us hope that he will not fall out with them before he gets as far as bricks and mortar. Well, then, observation properly used will keep him out of many pitfalls, if it does nothing more. Buildings to be erected on town sites, cramped, crooked and overshadowed by high and perhaps shapeless buildings, require very different treatment—even though the accommodation demanded is identical—from buildings in country towns or villages, where everything is freer and more open, and it is only your judgment—which, after all, is only your stock of observation under another name—that will tell you how to treat each individual site, observe your surroundings, and, if possible, reduce them to paper; never mind whether they are good, bad or indifferent, they should be considered, as they have, in most cases, a considerable power for good or evil over your own building. “Style” is, as a rule, the first stumbling block that has to be overcome, and it, no doubt, is a difficult question and is hard to generalise upon to any good end. The subject, the site, or the surroundings will generally help you to some conclusion on this point, or if not, your own or your clients' tendencies will perhaps settle the question. But whatever “style” you work in, do not lose your head. Dignity and reserve, your own observation must tell you, are worth cartloads of fussiness and elaboration. Do not be too slavish or think yourself bound to do this, that or the other, simply because it was done before so many hundred years ago; at the same time, do not be too original, or do things simply because they have never been done before. Observe how time has treated your neighbours, and contemplate your own budding design as though it were say twenty or thirty years old. You will then, perhaps, notice that the most elaborate and quite too charming parts of your building are such a mass of decay and dirt, that you cannot tell which is

the carving and which the soot. This being so, I should say omit your charming feature and do without your carving. In towns such as Liverpool, it seems to me you cannot have the exteriors of your buildings too simple,—a building of good proportion and balance throughout, constructed of some material—if there is one—that does not turn absolutely black will always hold its own, in my opinion, with your “ornamental” building which trusts as a rule, to confusion and bewilderment for its so-called beauty, and particularly if your simple building will keep tolerably clean, while your ornamental one becomes a mass of matter in the wrong place. Observation then will help you to make the design of your building a suitable one, as far as appearances go, and observation will also help you to make it a good, useful building, for I think one of the first things one should do upon being called in to do anything which is, more or less, new to us is to trot round and observe how other men have tackled the same problem. I do not wish to suggest that you should in anything but a limited sense copy other men. Improve upon them, is what I advise, and this can only be done by first observing their faults, and avoiding them, and then taking their good points and developing them.

In the choice of materials, too, observation should help us greatly. There are some materials, such as marble, onyx or alabaster, which are full of design and detail in themselves. These, therefore, should not be used, in my opinion, where you wish your own design to tell to advantage. I mean, of course, any design with much detail, such as mouldings, carving, &c., in it. This, you will probably say, is quite obvious; nevertheless one often sees figures of saints, &c., carved in alabaster, with the result that streaks of colour nearly always crop up just where they are least desired. A pair of piebalded ponies, nicely kept and well turned out, look very quaint and taking, particularly if they have plenty of ‘blood in’ them; but I never yet saw a pair of skewbalded saints, however much ‘blood’ they had, without experiencing a cold shudder down the small of my back. This may be an extreme case, yet the principle applies to many things besides saints. Where nature provides you with detail, carefully omit your own. Two designs are not required for one object, or at least your design should be so arranged that nature has fair play, and a chance given it to show itself off to advantage.

In fixing upon your “style” and materials do not shirk the subject or shut your eyes to the limitations of either one or the other. One sometimes meets with a tolerable design for a brick house, say, which has been much marred, simply because the Architect did not stop to think out the capabilities of his material; so that when, perhaps, too late to do anything else, huge pieces of stone have to be introduced in order to construct the design, instead of approaching the subject from the other end, and in the words so often used before designing your construction. With a little thought a brick and stone design for the same house could have been produced and would have looked ten times better than the crippled brick design; but, I am sorry to say, Architects often shut their eyes to practical difficulties, and are satisfied with turning out paper designs which can only be constructed at the sacrifice of much that might have been obtained with just a little more observation. Much depends upon the judicious choice of materials, and also upon their proper treatment in your design. Most people would agree, I fancy, that the Parthenon would not look as well constructed in terra-cotta as it does in marble, quite apart from the fact that a piece of marble may be more beautiful than a piece of terra-cotta. The Parthenon is a design of large, simple treatment, and of necessity would lose much of its dignity if constructed of a little material however beautiful that material might be. Therefore I say, if you are designing a Parthenon, select a material that will do it justice, but if you are obliged for some reason or other to use a small material, then your design should recognise the fact, and be thought out accordingly.

This concluded Mr. Stokes’ remarks to the Architects of Liverpool, with the

exception of a concluding paragraph, of which the following sentences only need be quoted:—

I fear I am not a great believer in the value of papers such as these—they take a lot of time to write, a very little to read, and next to none to forget, and then we all go on just as of yore. I cannot flatter myself that this one will prove any exception to the general rule.

A CHAT WITH NORMAN SHAW, R.A.

I HARDLY know how it was I came to call on Norman Shaw—the name is so phonetic, that to put a prefix or a handle of any kind, would spoil the effect, and so we all say Norman Shaw; and depend upon it, when once the world begins to call a man plainly by his Christian and surname, that man has done something worthy of being remembered. I had been in the North, and had dropped upon the little old-world village of Rothbury, coming over by the single line railway from Morpeth—reported to contain many very interesting architectural remains, but which were certainly not apparent from a hurried walk through the town from an extremely dirty hotel to an extremely dirty railway station, in the early hours of a cold and spiritless morning. Nor at Rothbury was there anything of much note, except the twelfth century bridge spanning the swollen Croquet, and inviting one to wander down the Northumberland lanes and climb the mountain upon which “Crag-side,” Lord Armstrong’s beautiful home in the woods, nestled. I had taken that “wander,” and had climbed the mountain side, and when I stood upon the plateau upon which Norman Shaw’s house stood, I thought that the little architectural coterie of Bloomsbury was very much nearer than it really was; and that was, perhaps, how I went to Hart Street to see one of the most delightful architectural artists in England. There is nothing typical of the man of T squares and drawing boards about Norman Shaw. The sleeves of his coat are not shiny, nor is there an atom of that superior “don’t-care-if-I-do-appear-shabby” look about the Royal Academician. In fact, he has the aspect of a Cabinet Minister, even though he possesses a supremely gentle and courteous bearing unknown to gentlemen who rule the political destinies of the moment.

Mr. Shaw’s room in Hart Street is as spick and span and as dustless as his own person; as there is no atom of dust upon the coat of Norman Shaw, so there is no atom of dust upon his table. On the walls a few original perspective drawings of his buildings, a few ornaments upon his mantelpiece, a cabinet in oak of his own design, and nothing more.

I told Mr. Shaw of the advent of “THE BUILDERS’ JOURNAL,” and he expressed, in most emphatic tones, the very great need there was for it, and then we settled down to ten minutes’ chat of the thrust and parry order—one delicately probing, the other as delicately shuffling from the point. For instance, when I began to talk of the very charming work of one Norman Shaw an apologetic manner came over the worthy artist, and nothing would induce him to frankly answer my questions. This was modesty, modesty of a very distressing and hurtful character—modesty which harms all and benefits none—modesty which is foolish when it comes from a talented man whom the world has recognised as such, and whose whole life has been devoted to good work under the highest influences.

Although Mr. Shaw calls his own work poor—think of it! and says in style it is nothing but a re-action from acute Gothic, he shows the better artist when I asked him to tell me what he considered was his best work.

“Best work!” said the Royal Academician, “best work!” and an honestly pained expression crept over his face. “I have no best! *I have never yet been satisfied.* I have never yet conceived a work which has not fallen miserably short of my conception. I am always striving to do something good, but when I think of what I have done, when I see how much I could improve *that*, now, how much I should like to alter *that*—and *that*—and *that*, it makes me shudder and I am miserable; therefore I have no best!”

Here we get the pure modesty—the modesty which is the hand-maiden of pure art, and how very little there is of it amongst Architects of to-day!

Norman Shaw has strong views upon the terribly inefficient education of architectural students. He can see no hope for it unless the Royal Academy greatly increases its scope, and throws its doors wide open to the architectural world.

JEAN FRANÇOIS MILLET.

The Peasant Painter of Barbizon.

By ARTHUR O’NEILL.

THE life story of Jean François Millet will seem, I am afraid, a sad and almost tragic one—a story of a constant purpose of brave effort, of great endurance and noble work—the story of a career which passed, after many struggles, from the darkness of penury into the light of ease, though the light came only in time to soothe the last years of, perhaps, the most penetrating of all the God-gifted souls who have devoted themselves to the divine task of interpreting nature to humanity, of discovering beauty where the common eye saw dross, of glorifying humility and elevating the variegated shreds of the humbleness of a peasant’s homely station into an atmosphere where he and his surroundings, his uncouth figure, his daily avocations shine resplendent in the firmament of art; and, like the stellar meteors, illuminate our sadly barren earth.

The Shakspearean dictum is more applicable to artists, perhaps, than to men of letters, that the lives of good men do live after them. It was never more positively illustrated than in the case of Jean François Millet. Those who are endeavouring to fathom the secrets of Nature and bring her manifold phases within the compass of the brush or pencil, may be presumed to know of the many instances which our own annals record of unrecognised genius, of an appreciated talent, of a great heart wearing itself away, by its strenuous palpitations, in a vain attempt to arrest the public notice. Shall we call Turner to witness, or David Cox, or Bonington, whose influence founded a “cult” in France, ere yet his own countrymen had learned to discern the precise technique of his own draughtsmanship and the wondrous luminosity of his aerial perspective. Shall we summon as witnesses those who bought from the Norfolk School in the days when it was young and grandly strong with the strength of youth.

You have heard of the terrible conflict with the fateful forces of George Müller, of George Mason who painted poems, of Frederick Walker, of poor George James Pinwell who would have been a giant if he had been allowed to live, of Paul Grey, the very name of a shade even in artistic circles, but the name of a man who would have deserved to be an Academician by this time if the powers of life and death had spared him to us.

Or to change the venue poll, the people who are proud of their privileged position at “private views,” and how many of them in France or England know George Michel, the old Crome and Cotman combined of the highlands to the north of Paris, who, with the vivid grasp of an athlete, as graphic as Salvator Rosa, depicted with a splendid mastery of all the artifices of art the nude beauties of the Buttes Chaumont, the quarries behind Montmartre, the thousand and one scenes of natural beauty which lie slumbering on either hand. The peasant-painter of Barbizon I have called

Millet. It is his own description of himself. He is always reminding his close and helpful friend Sensier that he is a peasant. "I am a peasant," he says in a letter to Sensier in April, 1867, "I have only wished people to think of the man who gains his bread by the sweat of his brow." But let it be marked that this peasant and painter and poet was not a boor. He could read Theocritus in Greek and once ventured on an illustrated translation of one of the Idylls. Poussin was his chief model—Poussin, the first of the Naturalists—and Virgil was his favourite poet; he was steeped to the tips of his finger nails in the classics of his own language; he studied Homer and Dante and Shakespeare; and one of his most grateful letters he addressed to M. Chassaing, in acknowledging the receipt of the poems of Robert Burns. Truly, it was fit that the genius who exalted rusticity, should be offered as a tribute to his especial talent the work of the poet ploughman who gave the humble daisy a distinction all its own.

Millet, peasant, as he loved to describe himself, was a man of more than common culture. He had read much, and he had the faculty—I doubt whether I should call it a happy one—of remembering everything. He rejoiced in living and dressing like a peasant, in striving to understand the peasant class in his Western birthplace of Grèville, and in the great forest of Fontainebleau, wherein he pitched his tent permanently for the quarter of a century of his productive life. It was in that spacious region of monarchical trees and cyclopean rocks, of umbrageous avenues and austere defiles; it was there, in the little village of Barbizon, where the one rim is decorated, from basement to rafters, with what are now the priceless drawings of artists whose names are emblazoned on the scroll of fame; there, in a long little one-storeyed cottage, it was that I was fortunate enough to make acquaintance with this singularly gifted painter of humble life. It is long ago; it was in 1873. I had taken introductions from Paris, where he had at last asserted himself, though for poor prices as compared with the sums his pictures bring in now-a-days, I had seen one of his numerous "Sheep Shearers" either in Goupils' or at the Salon in that year. What is more important, I had seen an etching of "The Angelus," that marvellous study which profoundly moved me. It was the emotion engendered by that grand and beautiful picture of rustic piety—of the peasants suspending their labour in the field as they listened to the bell of the distant church—which impelled me more than anything else to seek the inventor of the impressive, I could almost say audacious, composition. The introductions I carried were entirely unnecessary. It was one of the days when the dear Master was suffering another instalment of his earthly martyrdom. It was a bright May-day; but one of the terrible headaches, which made the latter years of his life years of pain, had compelled him to throw aside brush, palette and easel. I did not know that at the time. Millet received me most cordially. He asked me if I were an American, for that people, he said, had found out that there was "something in him" long before his compatriots had ended their dispute as to whether he was not vulgar. Imagine a man a little over medium height, heavily bearded, wearing apparently a fox-skin cap, with a singularly mobile face, with eyes that seemed to pierce one through—a man who had read much of English literature, but could not speak the language—a man who seemed to distrust the value of the words he was using, and yet was anxious to know all that was doing in the Art world on the other side of the Channel—a man who impressed one at once as heaven-favoured in his singular capacity for seeing into the very heart of things—a tree or flower, a herd in the pastures, a gleaner in the cornfields, a servant in the vineyard, or a visitor from abroad—all and everything were subjected to the close, but not obtrusive, scrutiny of those large and searching brown eyes. He would let me see none of his own work, except some charcoal sketches. He showed me, however, his portfolios, which were, to be frank, enclosed in sheets of brown paper, and there I saw a goodly sight of drawings by his constant friend, Theodore Rousseau, some sketches by Troyon, a few of the hasty

memoranda of Diaz, one, only, drawing by Corot, who until the last protested that he could not understand Millet. "I have my way of looking at things," he is reported to have said, "and those Barbizon men have another. They are clever, but they do not please me; I prefer my own method to theirs."

Millet had been smitten with the Japanese craze a few years before my visit, and came very nearly to a quarrel with his friend Rousseau over a *trouvaillie*, which fell to him at the Hotel Druot on one of his rare expeditions to Paris. There were fans and oddities, and all sorts of Oriental bric-a-brac, which he took more pleasure in, apparently, than in the lovely drawings and sketches which filled his invaluable brown paper sheathings.

But to try to describe to you the Poet, Painter, or the Peasant, Painter, the honourable and involuntary master of the Barbizon School of Art, would be to "mock description's littleness." He permitted himself, with his picturesque raiments, to be sketched only by one or two intimate friends. How it comes to pass that I have in my distant home large photographs of Millet and his wife—they hung on my library wall cheek by jowl with a pencil sketch of Corot—I cannot for the life of me say, for they are larger than the admirable engraving published by "Scribner," and I can only conjecture that I picked them up somewhere in Paris. There is one photograph which is remarkably true, and it was taken by a member of the Barbizon fraternity who did not disdain the camera, although they loudly protest against its employment as an adjunct to the legitimate implements of the painter's art. This photograph represents Millet standing, full length, in *sabots*, his back to a wall, and his head raised straight and proud; the leg a little forward, like a man who balances himself exactly; his hat is in his hand, his chest out, his hair combed back, and his eyes as if fixed on some threatening object. He wears the grey jersey of the country, and I again quote Sensier, "he might be one of those enthusiastic peasants, victims of our civil wars, who, vanquished, look at death without flinching." This picture is to me Millet's whole life; he was pleased when I said: "You look like a chief of peasants about to be shot." "He was taciturn," says my own spontaneous informant. "People tried to know him because he was eccentric; they tried to make him talk, and only succeeded in obtaining a few words of cold civility. He was confiding and talkative only with his friends. Walking through the forest, which had the power of making him forget his enemies, he was often eloquent to a remarkable degree. He became enthusiastic over the majesty of the woods, the crumbling of the antediluvian rocks. He had new and original thoughts. He saw man in the past, savage man, living happily under these great branches. Then, as the sun fell, he recalled the folk-legends, and his imagination took colour from the fading day. He explained the terrors of the peasant with the clearness of a seer."

(To be concluded.)

IRISH—ARCHITECTURE.

THE following communications and specimens of native professional journalism are too delicious to be conveyed direct into the limbo of the W. P. B. A certain weekly Architectural Journal advertised its requirement of the services of a clever Sub-Editor, and amongst hundreds of replies were the following:—

"Feb. 13th, 95.

Mr. A B C D * * * * * B L. writes in answer to the advertisement in to days *Daily News* which is as follows;—"Subeditor. A smart & clever subeditor wanted immediately. He must be a man of education, possessed of an appreciative knowledge of architectural subjects' etcetera.

As persons applying for posts of any kind are generally supposed to be a little autobiographical, it is perhaps right for me to say that having taken classical honors & prizes, & having graduated, in Trinity College, Dublin, I was called to the Irish Bar, which I followed for some years; but not

succeeding in getting briefs & being in want of money I have definitely given it up, & nine months ago came to London with a few of getting on the press either as an original writer or, failing that, as a reporter.

I have no *press experience of any kind*. This of course is a draw-back, *but not an insuperable one*, for first of all, instances are not wanting in various walks of life of men who have gained distinction in spheres of action for which they do not seem previously to have had any very proper training, it can also be surmounted every easily:—if you say—"where is your experience?" I answer "give it to me, and you will see its fruits."

I will be content with a salary of — a year, payable weekly, monthly or quarterly.

Enclosing a short article on architecture,

I am, yours faithfully,
A B C D * * * * * B L.

Excuse the change from the third to the first person."

Then comes the short article on architecture—

British architecture may be said to come from four sources—Greece, Italy, the Gothic and Saracenic. Of these the Grecian excels in beauty, to Italy is due the invention of the arch, the Gothic is perhaps suggestive of strength and ruggedness, the Saracenic or Moorish of picturesqueness. Association of ideas has so much to do with our judgments that it is hard to say how far these judgments correspond to things as they are, or to things seen through the atmosphere of our feelings. Perhaps most English people would prefer the Gothic to the Grecian style in a church, considering the latter more fitted to a heathen temple. Association of ideas may be the cause. But as most people will allow that each of the above classes has merits of its own, possibly the most perfect style would include a combination of them all. In architecture, as in many other things, the saying holds—"you must cut your coat according to your cloth." Old buildings to be preserved must be kept in repair—a truism to be borne in mind in the case of Shakespear's house or St. Paul's Cathedral. New ones will not start out of the ground for nothing. Hence those who build should look before they leap, and not be fools to build for wise men to buy. Buildings of a high and elaborate style must of course be paid for in proportion, else "poor men's cottages had been princes' palaces."

Another gentleman who states that he successfully edited one of the illustrated Art newspapers, enclosed a "Caustic criticism on present day pictorial illustration." He was also an Irishman, and here is the Caustic criticism—

"Is photography killing art? It would really appear so, judging from the wretched pictorial illustration of the present day, there is scarcely a modicum of art in it, yet we fondly imagine that we are becoming an artistic nation: the public is certainly unable to judge the merits of its illustrated press or it certainly would never submit to be imposed upon by most of the vile rubbish which now passes muster as pictorial illustration; the photographer and zincographer have between them brought it low indeed, and our picture galleries seem to be following suit—the photographer, or is it the "artist" turned photographer?—labouring under the delusion that careful study is not necessary now that he can so easily copy his poses from a realistic photo, and not content with copying the poses, copies the photo effect as well, quite ignoring the good old maxim, that "art is nature idealized," and finding his market with those who are content to accept 'shoddy' so that they may make a handsome profit thereby.

Such is modern pictorial art, unless it is 'made in Germany.'"

SOCIETY MEETINGS.

Edinburgh Architectural Association.

—At a meeting of this Association, at the Royal Institution, Mr. W. W. Robertson, the President, in the chair, Mr. Percy Fitzgerald, F.S.A., made a communication on "Adam Architecture in London." Having suggested that there were at present symptoms of a revival of interest in the work of this illustrious family of architects, the lecturer proceeded to deal in considerable detail with the architecture of Robert Adam, whom he described as "the flower of the flock," and a man of extraordinary versatility, dramatic power, and ability. His style was inspired by Diocletian's palace at Spalato, with all the peculiar incidents of which he became permeated. On Adam's return to this country, the lecturer showed how extensive his practice became, giving it as his opinion that no other architect ever enjoyed so large an amount of remunerative work. In London alone it was almost incredible the number of buildings he set up. As to his principles of style, one of the most outstanding features was his marked individuality, Adam putting his stamp on everything he did. His exact sense of proportion, his great care as to the minutest details, and his singularly refined taste in various directions, were notable characteristics of the man. Dr. R. Rowand Anderson, in moving a vote of thanks to the lecturer, said there was no doubt that the architecture of Adam was beginning to have its weight in the architectural study of the rising generation of architects, and they were fortunate in Edinburgh in possessing some of his very best examples. The Register House, to his mind, was the finest thing they had in the city. At the same time, he thought the father's work was a much more vigorous type of work than the son's.

Society of Antiquaries of Scotland.

The usual monthly meeting of the Society of Antiquaries of Scotland was held on the 11th inst., Mr. Gilbert Goudie in the chair. The first paper read was a description of a supposed mithraic temple, recently discovered at Woudham, in Kent, by Mr. James Lang, F.S.A. Scot., of Glasgow. Dr. David Christison, Secretary, gave an account of the forts on the southern slopes of the Lammermoors and the Moorfoots, which are generally distributed along the valleys of the smaller streams falling into the Tweed. Mr. Lockhart Bogle, F.S.A. Scot., gave an account of several prehistoric structures in Glenelg and Kintail, with ground plans and sketches. In the next paper an account was given of the discovery of a cist, with a cup-and-ring marked cover, in a sand-pit at the Cunnigair, Tillicoultry. The cist was of the usual character, but the covering stone was a huge block of granite six feet in length, and sculptured on its upper surface with rings, spirals, and lines. There was exhibited a finely-ornamented urn found near Harvieston Castle, which is now preserved in the Dollar Institution. In the last paper Bishop Dowden called attention to two late notices of the *cultus* of St. Ninian in England.

Plymouth School of Art.

—In the twelfth lecture, at the Plymouth School of Art, Mr. B. Priestley Shires, A.R.I.B.A., dealt mainly with the subject of Early English architecture, and explained the characteristic features of the different kinds of windows and doors, with their ornaments and enrichments. As regards the latter, Mr. Shires said the opening of the thirteenth century saw a new era in ornament, all attempts at Grecian and Roman imitation were given up, the heavy massiveness of the Norman style shaken off, and succeeded by a true English style, with a lightness and peculiarities not to be found even in Continental work. In some cases the carving is very free and graceful, but as a rule there is a spirited stiffness in the forms which is very characteristic and pleasing.

THE bridge at Cregrina has just been reconstructed under the direction of Mr. Stephen W. Williams, county surveyor for Radnorshire, Messrs. E. Davies & Son were the Contractors for masonry, and the Horseley Iron Co. carried out the ironwork.

DECAY OF BUILDINGS.

THOSE who have for any considerable course of years been in the habit of revisiting any particular ruin can scarcely fail to have observed how sensibly and how surely the course of decay, disintegration and downfall has progressed, even where there has been no deliberate mutilation. In many of the best preserved ruins we find—says *The Architect*—the surfaces of the mouldings and carving covered with an ever-fresh pulverulence. If you visit a building in this exposed condition after a hard winter, you are sure to find fresh spots where the details have fallen off through the recent frost, and in every ruin there occurs from time to time slips and downfalls of greater or less importance, showing that, long as they have resisted the assaults of time and weather, there are limits to their duration, and that those limits are by no means distant. How many of our ruined buildings have lost large portions within the memory of man. Indeed such downfalls, if their statistics could be collected, would be found to reach an alarming number and amount, while the silent and yet more fatal progress of decay is every day and every hour eating into the most beautiful and most precious architectural details. And how could it be otherwise, when walls constructed of small stone and rubble-work are exposed, with no protection but ivy and wall-plants, to the constant action of the most destructive of climates, when every shower penetrates the crumbling mass and every frost has its full swing in its disintegration, and even the more solid stone, from being kept in a constant state of saturation with water, has every cause of destruction in full and continued operation upon it, and all this for centuries together? Nor have these been the sole agents of destruction. Many—indeed the great majority—of our noblest abbey churches, and even some cathedrals, have been taken down for the value of their materials, and those which were left as ruins were for the most part spared more because there was no market for their material than for any care for their preservation, and it naturally follows that they would become the quarries which would supply all the petty buildings around them. Perhaps the most remarkable case of this is at Reading, where the walls of the abbey have been stripped of their ashlar, both without and within, and the rubble core only left. This has been continued in many instances up to our own day, and even now it is occasionally found in a certain degree to hold good, as at Easby Abbey, in Yorkshire, where the lower part of the buttresses appear to have been comparatively recently pulled down, as being the parts most easily got at, while the upper stages, being out of reach, are left unsupported and dragging over the walls which they were built to stay. For the most part, however, it is neglect and the want of timely care which we have now most to complain of. The proprietors of these melancholy yet glorious remains, though valuing and caring for them as picturesque ruins, frequently seem to forget their value as works of art and to prefer risking their falling to pieces bit by bit to the trifling interference with their picturesque effect which would be incurred by a timely repair.

THE Wilmslow District Council has received the sanction of the Local Government Board with reference to the borrowing of £3,130 for the completion of the works in connection with the southern or Fulshaw scheme of sewerage. The sum of £10,000 has already been expended, and another £10,000 is shortly to be spent in constructing a scheme for the northern end of the district, the District Council having already secured powers and the necessary land. The southern portion will have cost something like £14,000 when fully completed.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

68, St. Paul's Churchyard.
Feb. 15th, 1895.

To the Editor of "THE BUILDERS' JOURNAL."

SIR,—In the article of "THE BUILDERS' JOURNAL" No. 1, headed "A Chat with Mr. Penrose," I am reported to have said—in answer to the question "You have no opinion to offer on the reredos erected some years back?"—"None; it was Messrs. Bodley & Garner's work, and of its kind extremely fine." (The italics now only introduced.) This answer so entirely traverses my determination to say nothing whatever on the merits or demerits of works which have nothing to do with my own responsibility, that I am sure your interviewer must have failed to note down my answer correctly as to the words above given in italics.

Your obedient servant,

F. C. PENROSE.

[It is, of course, not impossible that our interviewer incorrectly noted Mr. Penrose's answer, though that is much more than improbable. We regret our worthy correspondent did not query the proof which was submitted to him, and which he kindly returned to us with one correction only—Ed.]

7, Finsbury Square, London, E.C.
Feb. 15th, 1895.

To the Editor of "THE BUILDERS' JOURNAL."

DEAR SIR,—I notice that in your issue of the 12th inst., you state a Mr. Mecenero was the artist for the mosaic panels in the dome of the Greek Church at Bayswater, this is incorrect, as the artist was an Englishman, Mr. Arthur E. Walker, of the Cedar Studios, Glebe Place, Chelsea, an old schoolfellow of mine.

I believe the contractors for the material and fixing were Greeks, and this may account for the mistake.

Yours faithfully,

WILLIAM HODSON.

PRICES CURRENT OF MATERIALS.

(From *The Builder*).

TIMBER.				TIMBER (continued).			
Greenheart, B.G.	ton	8/0/0	0/0/0	Satin, Porto Rico	0/0/0	0/1/6	
Teak, E.I., load	10/0/0	16/0/0		Walnut, Italian	0/0/3	0/0/7	
Sequoia, U.S., f.c.	1/0	2/6		METALS.			
Ash, Canada load	3/0/0	4/5/0		Iron—Pig, in Scotland	2/1/3	0/0/0	
Birch, do.	3/0/0	4/5/0		Bar, Welsh, in London	5/12/6	5/15/0	
Elm, do.	3/15/0	5/0/0		Do. do. at works in Wales	5/2/6	6/10/0	
Fir, Dantsic, &c.	2/15/0	3/0/0		Do. Staffordshire, in London	6/0/0	5/5/0	
Oak, do.	2/15/0	4/15/0		COPPER—British			
Canada	5/5/0	6/15/0		cake and ingot	42/10/0	43/0/0	
Pine, Canada red.	2/15/0	3/5/0		Best selected	43/10/0	44/0/0	
Do. Yellow	3/10/0	5/5/0		Sheets, strong.	50/0/0	0/0/0	
Lath, Dantsic, fath	5/10/0	5/10/0		Chili Bars	30/7/6	30/12/6	
St. Petersburg	5/0/0	6/10/0		YELLOWMETALB	0/0/4	0/0/4	
Wainscot, Riga				L E A D—Pig			
&c., log	2/15/0	5/0/0		Spanish	9/10/0	9/11/3	
Odessa, crown	2/15/0	5/0/0		English com.			
Deals, Finland				brands	9/11/3	9/13/0	
2nd & 1st std. rod	7/0/0	9/0/0		Sheet, English,			
Do. 4th & 3rd	7/0/0	8/0/0		6 lbs. per sq. ft.			
Do. Kiga	7/0/0	8/10/0		and upwards	10/15/0	11/0/0	
St. Petersburg,				Pipe	11/15/0	0/0/0	
1st yellow	9/10/0	12/0/0		Z I N C—English			
Do. 2nd yellow	7/10/0	9/0/0		sheet	18/10/0	19/0/0	
Do. white	8/0/0	10/10/0		Vieille Mon-			
Honduras, &c.	7/10/0	15/10/0		tagne	19/10/0	0/0/0	
White Sea	7/10/0	15/0/0		TIN—Strain	50/15/0	60/3/0	
Canada, Pine 1st	21/0/0	24/10/0		Australian	50/17/6	60/17/6	
Do. do. 2nd	16/10/0	17/10/0		English Ingots	64/10/0	64/15/0	
Do. do. 3rd, &c.	8/0/0	10/10/0		Banca	61/10/0	62/0/0	
Do. Spruce, 1st	8/0/0	10/10/0		Billion	60/10/0	61/0/0	
Do. do. 3rd and				OILS.			
2nd	6/10/0	7/10/0		Linseed	21/5/0	21/10/0	
New Brunswick	6/0/0	7/0/0		Cocanut, Coch	25/0/0	0/0/0	
Battens, all kinds	5/0/0	21/0/0		Do. Ceylon	23/0/0	0/0/0	
Flooring, boards,				Palm, Lagos	23/0/0	0/0/0	
sq. ft. in prep				Rapeseed, English			
1st	0/9/6	0/14/0		pale	22/0/0	0/0/0	
Do. 2nd	0/7/0	0/11/6		Do. Brown	20/5/0	20/10/0	
Other qualities—	0/5/0	0/7/0		Cottonseed ref.	17/5/0	18/5/0	
Cedar, Cuba, ft.	1/3	1/4		Oleine	21/0/0	22/10/0	
Honduras, &c.	1/3	1/4		Lubricating, U.S.	4/0/0	5/0/0	
Mahogany, Cuba	1/3	1/6		Do. refined	5/0/0	12/0/0	
St. Domingo,				TAR—Stockholm			
cargo av.	1/3	1/6		barrel	1/1/0	1/1/6	
Mexican, do. do.	1/3	1/6		Archangel	0/15/0	0/16/0	
Tobacco do. do.	1/3	1/6					
Honduras, do.	1/3	1/6					
Box, Turkey ton	4/0/0	15/0/0					
Rose, Rio	7/0/0	10/0/0					
Bahia	6/0/0	15/0/0					
Satin, St. Do-							
mingo	0/0/5	0/1/0					

SAWDUST.

THE Bishop of London's Fund has granted £1,000 towards the new church of St. Etheldreda, Fulham.

At a meeting of the Manchester City Council yesterday Alderman Hoy proposed a resolution which involved the acceptance of a tender for over £140,000 for the erection of a Technical School. The building, he said, would be a cheap one, and was needful to meet the requirements of the city.

THE Town Council of Newcastle-upon-Tyne, have decided to rebuild a portion of the quay and the grain warehouse. The cost will be £24,000.

MESSRS. GOTCH & SAUNDERS were the architects of the new church recently erected at Kettering, and the structure is built mainly of local Sandstone and Weldon Stone. The style of the fabric is late gothic. Mr. G. Henson, of Wellingborough, was the builder.

THE Leeds City Council, which already owns and works its tramways, has decided to promote "a Bill to empower the Mayor, Aldermen, and citizens of the city of Leeds to construct additional tramways, and for other purposes." The decision was arrived at by a vote of 46 to 1.

MR. J. S. CRAWSHAW, who has for several years past occupied the position of surveyor and sanitary inspector under the late Skegness Local Board and the present Urban District Council, has been elected surveyor to Weybridge Urban District Council, at a salary of £200 a year. There were upwards of 200 candidates for the post.

IT is proposed to build a small house on the Cleveland Moors. The material used will be local stone Ashlar, and the roofs will be covered with Whitland Abbey slates. Mr. A. E. Street, M.A., is the architect.

IT has been decided to adopt Mr. Meade King's scheme for rebuilding the bridge to the baths at Durham, which is not considered safe. The estimated cost of the work is £845.

THE gold medal of the Society of Engineers has been awarded to Mr. T. W. Baker, C.E., for his Paper on the "Utilisation of Town Refuse for Generating Steam;" an ingenious method of burning up the ash-bin collection, and using the heat for driving machinery, &c.

THE opening to the public of Lincoln's Inn Fields Gardens, which have been taken over by the County Council, will probably take place on Saturday the 23rd. Sir John Hutton will perform the ceremony.

THE parliamentary estimate of the new works proposed to be authorised by the Mersey Docks and Harbour Board Bill, as prepared by Mr. A. G. Lyster, C.E., is set down at £105,000, of which £67,250 will be expended upon the floating landing-stage in connection with the Birkenhead Dock. The balance of £37,750 will be for the construction of four piers and one bridge to connect the stage with the river wall, &c. The new borrowing powers sought to be exercised under this Bill are for £160,000.

THE work recently executed by Messrs. Crace at the Town Hall, Leeds, for the City Council, cost £5,175.

THE cost of the proposed restoration of the lower part of the Tower of Dewsbury Church, with the addition of new buttresses and a belfry stage, together with the rebuilding of the north aisle, will be upwards of £25,000. The existing clearstory windows have been replaced by others of a more suitable character. The architect is Mr. A. E. Street.

THE Special Sub-Committee of the Liverpool Library, Museum, and Arts and Technical Committee, who are engaged in considering the matter of provision for technical classes, have had before them a report and plans submitted by a Mr. Armstrong, and also a report and sketch by the City Surveyor, prepared in accordance with the resolution of the Committee at a previous meeting, and showing how the site at the corner of William Brown Street and Byrom Street could be made to afford accommodation for a technical school, an extension of the museum, and a large public hall.

MESSRS. MOLINEUX, WHITFIELD & Co. are erecting new Bank premises at Eastbourne, from the designs of Messrs. Mitchell & Ford, architects, of Eastbourne. The style adopted is Italian Renaissance, the ground floor being treated as a base, with panelled piers and plinth, to the first and second floors, which have engaged fluted Corinthian columns and pilasters, extending the height of both stories, surmounted by entablature with pediments. A dome, covered with Braby & Co.'s metallic tiles, is introduced as a central feature. The building is to be faced with Bath stone, the cornices and principal projections being of Portland stone. The roof will be covered with Westmoreland green slates. The internal fittings of bank, screens, dados, &c., are in polished mahogany. Electric light is to be fitted throughout the building. The whole of the plastered work is finished in Keene's cement. The building will be completed in about twelve months. The floors are to be fireproof, by Messrs. Mark Fawcett & Co. The builder is Mr. M. Martin.

THE question of appointing lady Inspectors seems to be a vexed point with some of the London Vestries at the present moment. The Holborn Union considers that the appointment of female Inspectors to the Local Government Board is a reform greatly needed, and the Islington Vestry has gone so far as to appoint a lady Sanitary Inspector at a salary of £100 per annum, with a "rise" of £10 a year to a maximum of £150.

AMONG the additions recently made to the Ruskin Museum is a series of the original pencil drawings by Professor Ruskin, which formed the foundation of a dozen of his published plates, illustrating "The Seven Lamps of Architecture," and "The Stones of Venice." It is well known to book-lovers, and the possessors of copies of the first edition of "The Seven Lamps" especially, that the plates of that issue alone were etched by the author himself.

THE members of the corporation of St. Helens, a few days ago, had the interesting experience of walking through the whole length of the new intercepting sewer which is being constructed from Ashcroft's Bridge, Parr, to the outfall at the Double Locks, and which is now completed within a few yards. The main sewer already constructed reaches from Spray's Bridge, Boundary Road, to Ashcroft Street, a distance of about 3,000 feet. The new added portion is 1,900 yards long, and is being constructed by Mr. Peter Ticker, Builder, Fleet Lane, the contract being for £15,000, which will make the total cost of the sewerage system about £50,000.

MESSRS. ROUMIEU & AITCHISON are the Architects for the new buildings of the Grosvenor Hospital for Women and Children, in Vincent Square, Westminster, which will be commenced early in the Spring.

THE Society of Arts is offering two prizes—a gold medal and £20, and a silver medal and £10—for the best photogravure copy produced from Mulready's picture, "Choosing the Wedding Gown," now exhibited in the South Kensington Museum, the object of the offer being to encourage the development of photogravure in this country. Permission to photograph the picture has been obtained by the society from the Science and Art Department.

THE Ottawa Minister of Trade states that the lowest tender for laying the Pacific cable has been received from a London firm, the amount being £1,517,000. The route proposed is from Vancouver to Fanning Island, Fiji, and Norfolk Island, the cable dividing at the last-named place into branches to New Zealand and Australia. The amount of the tender is about half the estimate made by the British Postal authorities.

THE Louvre possesses a treasure hitherto unsuspected, and the discovery is due to a German *savant*, Dr. Winter. The fine marble designated "A Greek King as Hercules" is in reality the portrait of Mithridates Eupator, due to the chisel of a sculptor of Rhodes. Dr. Winter, who belongs to the Berlin Museum of Antiquities, has proved the authenticity of the marble by the aid of documents in the possession of M. Théodore Reinach.

BOOKS RECEIVED.

The Local Government Annual—an Official Handbook, 1895. Fourth year of publication, 1s. 6d. S. Edgcombe-Rogers, Dorset House, Dorset Street, E.C.

A little volume which claims to be the only complete Local Government Directory published. It contains a mass of useful information on local government matters, but its index is sadly in need of revision.

The London Building Act, 1894. With the Bye-laws and Regulations of the London County Council, and Introduction, Notes, Cases, and Index. By A. J. David, B.A., LL.B. 3s. 6d. Crosby, Lockwood and Son, London.

The author states that the aim of the present volume is to facilitate the perusal and study of the very important statute with which it deals, and to make more easy of acquisition a knowledge of the numerous details distributed throughout the different parts of the Act. We think the author has done what he aimed at in the production of his neat and cheap little work.

The London Building Act, 1894. With Appendices containing Statutes, other than the Building Act, still in force and affecting building operations; also the Bye-laws, Regulations, and Standing Orders of the London County Council, and of the Commissioners of Sewers of the City of London. With Concise Notes and Cross References. By William Russell Griffiths, LL.B., of the Inner Temple, and Francis W. Pember, M.A., Fellow of All Souls. 12s. 6d. London: William Clowes and Sons, Ltd.

The editors present this volume to the public in the hope that, though it may not be absolutely exhaustive of the subject, it may yet be of some assistance to those who have to observe or to enforce the statutory obligations imposed on persons interested in building operations in London. We should be inclined to add greater praise to this work than the editors feel inclined to offer it. It certainly is as exhaustive as any work upon the same subject. Its references are ample and plainly made, its indices are full and well printed, and the work in its entirety is one which should find a welcome from those to whom it appeals.

The Quantity Surveyor. By Charles Henry Searle. Being a treatise on the most Modern and Approved Methods of Measuring the various Artificers Works in connection with Buildings, Drawing up Bills of Quantities, and Drafting Specifications and Contracts. In parts, 1s. 8d. per part; of the Author, 16, Southwark Street, London, S.E.

The author has sent us the six parts already published, and there is an enormous fund of technical knowledge shewn in the compilation of the work. It appeals to the professional Quantity Surveyor and to the Architect who takes off his own quantities, and to all other professional persons anxious to get an insight into this very dry but very useful department of professional study. To those, we know of no work more plainly or more carefully dealing with the subject, and we hope that further editions may be called for so that the proprietor editor may be able to reduce his price down to popular proportions.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

CANTERBURY.—For pulling down premises, and erection of four cottages on same site, St. Radigund street. Mr. W. J. Jennings, architect, 4, St. Margaret street, Canterbury:—

Amos and Food ...	£860 0 0
Hull, J. J. ...	780 0 0
Martin, W. W. ...	750 0 0
Geury, F. T. ...	738 0 0
Judges, W., Boughton, nr. Faversham*	718 0 0

* Accepted.

DECAYED STONEMWORK
Permanently RESTOREDWITH
Tabary's Patent Metallic Stone Cement.ESTIMATES FURNISHED BY
A. DREYFUS & CO.,
21, Edmund Place, Aldersgate St., London, E.C.**BRICKS** 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than STOCKS.LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.**A. W. ITTER,** Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.**CONTENTS:****SECTION I. SECTION II.**
Sanitary Specialities. Builders' Requisites.
SECTION III. SECTION IV.
Refractory Materials. Farm & Stable Fittings

Will be forwarded Post Free on Application.

CATALOGUE
FOR **1895**
OATES & GREEN, LD.,
STONEWARE and FIRECLAY WORKS,
HALIFAX.**CAERPHILLY.**—For widening and improving road between
Caerphilly and Senghennydd, for the Urban District Council.
Mr. A. O. Harpur, Surveyor, Council Offices, Caerphilly.

Quantities by Surveyor:—		
Jones and Thornley ...	£5,367	15 0
Winnel, John ...	2,869	17 0
Jenkin, Brock, and Son ...	2,702	4 2
Allen, James ...	2,235	1 8
Mathias, R. J. ...	2,195	14 2
Harries, Thos. ...	2,142	16 8
Page, E. H. ...	2,048	16 8
Barnes, Chaplin, and Co. ...	2,042	4 2
Gibbon, M. ...	2,020	18 4
Mackay, John ...	1,991	9 0
Davies, T. W. ...	1,968	7 10
Morgan, Wm. ...	1,959	4 8
Lloyd and Powell ...	1,891	0 5
Taylor, Thos. ...	1,820	12 6
Rees, Thos., Ely, near Cardiff *	1,801	19 8
Love, David, and Sons ...	1,771	4 2
Batchelor and Snowden ...	1,765	10 0
[Engineer's estimate, £1,996.]		
* Accepted.		

DARWEN (Lancs.)—Accepted for extensive additions to
stores for the Darwen Industrial Co-operative Society. Mr.
J. B. Thornley, architect, Market street, Darwen. Quantities
by the architect:—

Masonry and Bricklaying.—Knowles, J.,		
Darwen ...	£4,318	0 0
Joinery and Slatting.—Shorrocks, R. ...		
Darwen ...	3,149	0 0
Ironwork—Cast and Wrought.—		
Coulthurst, H. J. and A., Darwen, ...	452	0 0

DURHAM.—For new w.c. block, dining-room, &c., at the
County of Durham Lunatic Asylum, Sedgfield. Mr. Wm.
Crozier, A.M.Inst. C.E., County Architect, Shire Hall,
Durham. Quantities by Mr. J. Ezra Miller, A.M.Inst. C.E.,
Tunstall road, Sunderland:—

Marshall, G. and Son, Darlington ...	£764	10 0
Atkinson, W. C., Stockton-on-Tees ...	759	15 10
Elliot, J., North Shields ...	705	0 0
Graddon, J. G., Durham ...	676	7 0
Hunter, T., Washington ...	643	0 10
Draper and Sons, West Rainton* ...	637	11 7
* Accepted.		

FARNHAM.—For erecting new Board Schools, East street,
Farnham. Mr. J. A. Eggar, architect, Farnham:—

Hall ...	£7,780	10 0
Belham and Co. ...	7,473	0 0
Martin, Wells, and Co. ...	6,890	0 0
Patrick and Co. ...	6,796	0 0
Smith ...	6,757	10 0
Chuter ...	6,598	10 0
Field and Co. ...	6,568	0 0
Goddard and Sons ...	6,548	0 0
Jenkins and Sons ...	6,449	0 0
Kemp ...	6,297	0 0
Fitt ...	6,279	0 0
Bottrill and Son ...	6,230	0 0
Peters ...	6,125	0 0
Chinchen, Bournemouth (accepted) ...	6,000	0 0

EGHAM.—For erecting new house, Rusham Park Avenue,
Egham, for Mr. F. Turner. Mr. Thos. R. Richards, archi-
tect and surveyor, 42, Theobald's road, W.C. Quantities
supplied:—

Norris and Sons ...	£1,033	0 0
Reavell, George ...	985	0 0
King, G. H. ...	950	0 0
Sleep, J. (accepted) ...	779	0 0

KING'S LYNN.—For the construction of a sewer, Saddlebow
road, for the Corporation. Mr. E. J. Silcock, C.E., Borough
Engineer, King's Lynn:—

Cockrell, J. W. ...	£752	7 10
Smith, W. F. ...	710	0 0
Girling and Coe ...	703	0 0
Bateman, J. ...	654	2 1
Fayers, R. W. ...	619	13 8
Clarke, R., Jun. ...	580	0 0
Collison, H., Lynn (accepted) ...	574	6 0
[Engineer's estimate, £600.]		

HENLEY-ON-THAMES.—Accepted for sewerage extension
works, contracts 1 and 2, for the Corporation of Henley-on-
Thames. Messrs. Shone and Ault, C.E.'s, Victoria street,
S.W.:—

Cooke, B., and Co., Battersea ...	£8,750	0 0
IPSWICH.—For the supply of three wooden hopper barges to carry 70 tons each, for the dock commissioners:—		
per barge.		
Stone Bros., Brightlingsea ...	£750	0 0
Bevis, F., Portsmouth ...	750	0 0
Forrest and Sons, Ltd. ...	549	0 0
Shruballs, H., Ipswich ...	500	0 0
Beeching Bros. ...	450	0 0
Orvis and Fuller, Ipswich ...	420	0 0
Lee and Son, Rochester ...	355	0 0
Radford and Co., Leadenhall Street, Lon- don (accepted) ...	260	0 0

LONDON.—For the erection of conveniences at Bostall
Heath, for the London County Council:—

Woolwich and District Co-operative Builders, Ltd. ...	£650	10 0
Proctor, E. ...	629	0 0
Stephens, H. J. ...	591	16 0
Wells, W. ...	581	0 0
Wallis, A. ...	580	5 5
Julyan, R. H. and E. J. Locker ...	499	16 0
Godbolt, C. ...	497	0 0

LONDON.—For the enlargement and alteration of the Ken-
nington Fire Brigade Station, for the London County
Council:—

Stimpson and Co. ...	£11,800	0 0
Scharien and Co. ...	11,875	0 0

LONDON.—For the provision of a permanent school on the
site in Bailey's lane, South Tottenham, to provide accommo-
dation for 393 children, and for a house for the school-keeper
with a room for manual training purposes underneath, and a
hall, for the School Board for London. Mr. T. J. Bailey,
architect:—

For brick- work in cement, add		
Gregar, W., and Son ...	£10,800	0 0
Foster and Dicksee ...	10,800	0 0
Pattinson, S. and W. ...	10,522	0 0
Miskin, C. ...	10,217	18 3
Stimpson and Co. ...	10,050	0 0
Lawrance, E., and Sons ...	9,956	0 0
Kilby and Gayford ...	9,957	0 0
Dabbs, W. M. ...	9,891	0 0
Cox, C. ...	9,808	0 0
Shurmer, W. ...	9,802	6 0
Treasure and Son, ...	9,586	0 0
Harrington, N.* ...	9,586	0 0
* Recommended for acceptance by the Works Committee.		

LONDON.—For alterations and repairs to the "Old Farm
House," public-house, Kentish Town road, for Mr. Green.
Mr. Albert E. Pridmore, architect and surveyor, Broad street
buildings, E.C.:—

Collins, C. ...	£412	0 0
Randall ...	408	0 0
Gray, E. W. ...	385	0 0
Gould and Brand ...	380	0 0
Ellis and Dodd ...	359	7 0
Emmans and Co. ...	349	0 0
King and Co. ...	330	18 0
Wiltshire and Co. ...	283	0 0
Davenport and Co. ...	269	0 0
London and Co. ...	269	0 0

LONDON.—For providing new cloak-rooms for the infants'
department to the Winstanley road School, Battersea, for the
School Board for London:—

Lathey Bros. ...	£223	0 0
Rice and Son ...	159	0 0
Garrett, J., and Son ...	150	0 0
Wood, G., and Co. ...	146	10 0
Williams, R. E., and Sons ...	140	0 0
Hammond, W., 72, York rd., Battersea* ...	113	0 0
* Recommended for acceptance by the Works Committee.		

LONDON.—For erecting a laundry-centre and a manual
training-centre in connection with the Duncombe road School,
Upper Holloway, and for providing a covered playground for
girls and infants, for the School Board for London. Mr. T.
J. Bailey, architect:—

For brick- work in cement, add		
Grover, J., and Son ...	£1,910	0 0
McCormick and Son ...	1,825	0 0
Willmott, J., and Sons ...	1,795	0 0
Houghton, E., and Son, 74, Lancaster rd., Stroud	1,621	0 0
Green, N.* ...	1,621	0 0
* Recommended for acceptance by the Works Committee.		

LONDON.—For providing rooms in connection with the
Montem street School, Tollington Park, and for erecting a
laundry-centre for the School Board for London. Mr. T. J.
Bailey, architect:—

For brick- work in cement, add		
Willmott, J., and Son ...	£6,429	0 0
Yorbury, R., and Sons ...	5,745	0 0
Cox, C. ...	5,600	0 0
Lawrance, E., and Sons ...	5,506	0 0
Houghton, E., and Son, Stroud Green* ...	5,218	0 0
* Recommended by the Works Committee for acceptance.		

LONDON.—For the provision and erection of three temporary
iron buildings on the sites in Dragmire lane, Balham, the
"Grove," Earlsfield, and Smallwood road, Garratt lane, for
the School Board for London. Mr. T. J. Bailey, architect:—

Dragmire lane, Balham.		
Lysaght, J., Ltd. ...	£1,676	0 0
Dixon, I., and Co. ...	1,657	10 0
Cruwys, T. ...	1,500	0 0
Charteris, D. ...	1,475	0 0
Crogon and Co., Ltd. ...	1,465	0 0
Harbrow, W. ...	1,395	0 0
Humphreys, Ltd. ...	1,350	0 0
Keay, E. C. and J., Ltd.* ...	1,279	15 0
Morton, F., and Co., Ltd. ...	1,224	0 0

"The Grove," Earlsfield.		
Lysaght, J., Ltd. ...	£1,610	0 0
Dixon, I., and Co. ...	1,571	4 6
Cruwys, T. ...	1,450	0 0
Crogon and Co., Ltd. ...	1,420	0 0
Charteris, D. ...	1,385	0 0
Harbrow, W. ...	1,345	0 0
Morton, F., and Co., Ltd. ...	1,308	0 0
Keay, E. C. and J., Ltd. ...	1,205	0 0
Humphreys, Ltd.* ...	1,200	0 0

Smallwood road, Garratt lane.		
Lysaght, J., Ltd. ...	£1,648	0 0
Dixon, I., and Co. ...	1,616	5 0
Cruwys, T. ...	1,600	0 0
Crogon and Co., Ltd. ...	1,440	0 0
Charteris, D. ...	1,432	0 0
Harbrow, W. ...	1,378	10 0
Humphreys, Ltd. ...	1,326	0 0
Morton, F., and Co., Ltd. ...	1,276	5 0
Keay, E. C. and J., Ltd.* ...	1,230	0 0
* Recommended for acceptance by the Works Committee.		

LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**J. BATCHELAR & CO.,**
48, HAMMERSMITH ROAD, W.

INTERNATIONAL BUILDING TRADES EXHIBITION,

THE SECOND OF A SERIES UNDER NEW MANAGEMENT,
WILL BE HELD AT THE
ROYAL AGRICULTURAL HALL, LONDON,
FROM MARCH 25 TO APRIL 4.

The Consultative Council, consisting of gentlemen of high repute in the Professional and Manufacturing World, are taking special interest in this Exhibition, for the purpose of securing the greater development of Trade in connection with the Building Industries.

CONSULTATIVE COUNCIL.

BANISTER FLETCHER, J.P., D.L., F.R.I.B.A., *Chairman.*

J. PARNELL ALLEN, P.A.S.I., Newcastle-on-Tyne.
CHAS. BARRY, F.S.A., F.R.I.B.A.
ERNEST BENEDICT, C.E., (*The Indian Engineer*).
T. BLASHILL, F.R.I.B.A., Architect to the London County Council.
T. CHATFIELD CLARKE, F.R.I.B.A.,
F. R. FARROW, F.R.I.B.A.
LEWIS H. ISAACS, F.R.I.B.A.
CHAS. LYNAM, F.R.I.B.A.
J. DOUGLASS MATHEWS, F.R.I.B.A., F.S.I.
EDMUND A. PONTIFEX, M.Inst.C.E., Master of the Armourers' and Braziers' Company.
JOHN E. SEARS, F.R.I.B.A.

E. J. KIBBLEWHITE, A.S.A. (*Editor of THE BUILDING NEWS*).
GILBERT WOOD, F.R.G.S. (*The Architect*).
JOHN MOLEM BURT (John Molem & Co.), Master of the Liners' Company.
H. H. BARTLETT (Perry & Co.), Past President Institute of Builders.
T. FREEMAN, F.G.S., F.S.S., Warden Shipwrights' Company.
LAZENBY LIBERTY (Liberty & Co.), Master of Glass Sellers' Company.
THOS. MINTON, J.P. (Mintons, Limited).
H. GREVILLE MONTGOMERY (*The British Clay-worker and Potter*).

PEARSE MORRISON, Master of Blacksmiths' Company.
W. NISBET BLAIR, C.E., Borough Engineer and Surveyor, St. Pancras.
LEWIS ANGELL, C.E., Borough Engineer and Surveyor, West Ham.
ALFRED DARBYSHIRE, F.S.A., F.R.I.B.A., Manchester.
F. BENNETT SMITH, F.R.I.B.A., Manchester
FREDK. T. PILKINGTON.
LATHAM A. WITHALL, F.R.I.B.A., F.S.I.
T. LOCKE WORTHINGTON, A.R.I.B.A., Assoc. San. Inst.

T. FREEMAN, Hon. Sec

Full Particulars on Application to **THE MANAGER, 222, STRAND, LONDON. W.C.**

Telegrams—"BATIMENT, LONDON."

LONDON.—For the provision of a manual training centre in connexion with the Gifford street School, Islington, for the School Board for London. Mr. T. J. Bailey, architect:—

Willmot, J., and Son	...	£1,630	0	0	£36	0	0		
Grover, J., and Son	...	1,552	0	0	24	0	0		
Gregar, W., and Son	...	1,549	0	0	24	0	0		
McCormick and Sons	...	1,517	0	0	23	0	0		
Staines and Son	...	1,461	0	0	21	0	0		
Lawrance, E., and Sons	...	1,364	0	0	28	0	0		
Harvey, J., 57, Red Cross street, E.C.	...	1,335	0	0	17	0	0		

* Recommended by the Works Committee for acceptance.

LONDON.—For alterations and improvements to the Central street School, St. Luke's, for the School Board for London. Mr. T. J. Bailey, Architect:—

McCormick and Sons	...	£4,100	0	0	£17	0	0		
Staines and Son	...	4,011	0	0	30	0	0		
Gregar, W., and Son	...	3,988	0	0	50	0	0		
Cox, Charles	...	3,773	0	0	19	0	0		
Hearle and Farrow	...	3,752	0	0	36	0	0		
Williams, G. S. S., & Son	...	3,687	0	0	37	0	0		
Vernall, Danes and Co.	...	3,617	0	0	24	0	0		
Lawrence, E. and Sons	...	3,568	0	0	37	0	0		
Grover, J., and Son	...	3,557	0	0	27	0	0		
Minter, F. G., Johnson street, Westminster	...	3,312	0	0	50	0	0		

* Recommended by the Works Committee for acceptance.

LONDON.—For the provision of a laundry centre in connection with the Southampton street School, Camberwell, and for other works, for the School Board for London. Mr. T. J. Bailey, Architect:—

Holloway Bros	...	£1,614	0	0	£33	0	0		
Downs, W.	...	1,599	0	0	30	0	0		
Holliday and Greenwood	...	1,533	0	0	82	0	0		
Marsland, J.	...	1,497	0	0	44	0	0		
Triggs, E.	...	1,440	0	0	56	10	0		
Garrett, J., and Son, 40, Old Town, Clapham	...	1,330	0	0	44	0	0		

* Recommended for acceptance by the Works Committee.

LONDON.—For erecting a cookery centre in connection with the Priory-grove School, Wandsworth road, and for other work, for the School Board for London. Mr. T. J. Bailey, Architect:—

Rice and Son	...	£1,888	0	0	£40	0	0		
Newton, G.	...	1,752	5	0	34	9	0		
Triggs, E.	...	1,571	10	0	54	0	0		
Akers, W., and Co.	...	1,558	8	4	61	10	9		
Garrett, J., and Son	...	1,531	0	0	37	0	0		
Marsland, J.	...	1,492	0	0	42	0	0		
Downs, W., Hampton st., Walworth road, S.E.	...	1,499	0	0	35	0	0		

* Recommended for acceptance by the Works Committee.

LONDON.—For the provision of a laundry centre in connection with the Vicarage road School, Plumstead, and for other work, for the School Board for London. Mr. T. J. Bailey, Architect:—

Holliday and Greenwood	£1,496	0	0	£48	0	0			
Mid-Kent Building and contracting Works, Ltd.	1,344	12	6	44	6	6			
Craig, T. H.	1,315	16	0	34	8	6			
White, T., and Son	1,304	17	11	44	9	2			
Calnan, M., and Co.	1,310	0	0	25	0	0			
Proctor, E.	1,260	8	0	32	12	0			
Kirk and Randall	1,244	0	0	43	0	0			
Akers, W., and Co.	1,225	10	0	58	10	0			
Otway, J., Chislehurst	1,197	0	0	30	0	0			

* Recommended by the Works Committee for acceptance.

COMPETITIONS.

COUNTY BOROUGH OF WEST HAM. COMPETITION.

The Council of the County Borough of West Ham propose to ERECT a TECHNICAL INSTITUTE and PUBLIC LIBRARY in Romford Road, and they hereby invite Architects to submit DESIGNS for the same in competition.

Premiums of £250, £150 and £100 respectively will be paid to the Authors of the Designs which are placed by the Assessor first, second, and third in point of merit.

The Competitor to whom the first premium of £250 may be awarded will be employed as Architect, and will be remunerated in accordance with the schedule of professional practice and charges of architects, published by the Royal Institute of British Architects, such remuneration being independent of the premium.

The Council have appointed Mr. J. MACVICAR ANDERSON, F.R.I.B.A., 6, Stratton Street, Westminster, W., as their Assessor and Professional Adviser.

Designs are to be delivered at the Town Hall, West Ham, E., not later than FOUR p.m., on WEDNESDAY, 1st May, 1895.

Full particulars of the instructions and conditions can be obtained on application to the undersigned, on payment of a deposit of One Guinea, which will be returned in the event of the applicant either submitting a Design, or returning the instructions within one month from the date of receiving them.

By order of the Council,

Town Hall, West Ham, FRED. E. HILLEARY,
January 21st, 1895. Town Clerk.

IPSWICH.—MARCH 23.

DESIGNS are invited for the Building of a WORKHOUSE and INFIRMARY, with Specifications and Estimate. Premiums £100 and £50. My. A. F. VULLIAMY, Clerk to the Guardians.

ERDINGTON (near BIRMINGHAM), MARCH 30.

COTTAGE HOMES.

The Guardians of Aston Union invite Competitive Plans, with specifications and estimate, of Cottage Homes to be erected at Erdington, near Birmingham. The Architect who sends in the plans selected as best will be appointed Architect for the erection of the buildings, or be awarded a premium of £70, as the Guardians may decide; and he who sends in the plans selected as second best will be awarded a premium of £30.

A copy of instructions to Competitors and conditions of competition, together with a plan of the site, may be obtained on and after 9th inst. from Mr. JOHN NORTH, Clerk, Union Offices, Vauxhall Road, Birmingham, on payment of £1 rs., which will be returned on the receipt of bona fide plans, specifications, and estimate. Plans, &c., must be delivered by March 30.

TO ARCHITECTS.

DESIGNS and ESTIMATES are invited by Mr. N. Miller, of 95, Fishergate, Preston, Lanc. for a proposed FIRE-PROOF BLOCK of SHOPS, OFFICES, TWO HOTELS, &c., at a cost of from £45,000 to £50,000 (which latter sum must not be exceeded), on an area of 2,500 square yards abutting on to Church street, Lancaster road, Jackson-street, and Birley street, in the County Borough of Preston, Lancashire.

Premiums of £150, £100 and £50 are offered (in the adjudged order of merit) for the three designs which are selected as the most suitable, and which three designs will become the absolute property of Mr. Miller.

The winner of the first or any other premium will not necessarily or in consequence become entitled to carry out the work, but if he be selected to do so, the premium will be deducted from his remuneration.

A plan of the site with instructions to Architects can be obtained from Mr. MILLER, on payment of £1 rs. which will be returned to those sending in bona fide Designs.

All Drawings, &c., must be marked with a motto or device, and sent to the Borough Engineer's Office, Town Hall, Preston, and the name and address of the designer in a sealed envelope, bearing on the outside the same motto or device, to Mr. MILLER, not later than the 27th day of APRIL, 1895.

DURHAM.—MARCH 25.

COMPETITIVE SCHEMES are invited for the SEWAGE DISPOSAL of the District. Premiums £100 and £50 for Two Best Schemes. Mr. F. MARSHALL, Town Clerk, Durham.

SWANAGE SCHOOL BOARD.

The above Board invite COMPETITIVE DESIGNS from Architects for NEW SCHOOLS at Swanage.

First premium, £30; second, £15.

Mr. WALTER I. FLETCHER, F.R.I.B.A., will act as assessor. For copies of plan of site and instructions to Architects, apply to "The Clerk to School Board, Swanage," such application to be accompanied with the sum of 10s., which will be returned in case a bona fide design is sent in by NOON on the 6th day of MARCH, 1895.



BLACKMAN VENTILATING COMPANY, LTD.,

Engineers and Specialists in
VENTILATING AND WARMING
Public and Industrial Buildings, Schools, &c.
20,000 INSTALLATIONS OF MECHANICAL VENTILATION IN SUCCESSFUL USE.
63, FORE STREET, LONDON, E.C., AND BRANCHES.

Now Ready, price Four Shillings.

LAXTON'S

BUILDERS' PRICE BOOK

For 1895.

"The acknowledged standard work of reference."

Containing above 72,000 Prices.

The Edition has been considerably enlarged and completely revised according to the present Prices of Materials and Labour, and also contains

THE LONDON BUILDING ACT, 1894;

together with many Useful and Important Memoranda and Tables, and Prices and Descriptions of New Materials and Inventions suited to the Builder, Contractor, and Engineer, and all Trades connected therewith; Bye-Laws of the London County Council; also Regulations by the Council applying to Theatres and other Places of Public Amusement; List of Aldermen and Councillors of the London County Council; also the District Surveyors, with their respective Districts.

Notes of Cases and Decisions in the Superior Courts.

KELLY & CO., LTD.,

182, 183 and 184, HIGH HOLBORN,
SIMPKIN, MARSHALL, HAMILTON, KENT & CO.,
Limited, Stationers' Hall Court, E.C.

And may be ordered of all Booksellers.

Just Ready. Royal 12mo cloth, 12s. 6d.

THE LONDON BUILDING ACT, 1894.

With Notes and Cross References and an Appendix containing such existing Statutes as still affect building operations within the Administrative County of London; also the Bye-laws, Regulations, and Orders of the London County Council and of the Commissioners of Sewer of the City of London. By W. RUSSELL GRIFFITHS, LL.B., of the Inner Temple and Midland Circuit, Editor of "The Statutes Regulating London Building," and FRANCIS W. PEMBER, M.A., of Lincoln's Inn, Fellow of All Souls College, and late Eldon Law Scholar; Draftsman of the Bill as originally introduced into the House of Commons. London: WM. CLOWES & SONS, LTD., 27, Fleet-street.

Publishing in Parts as Ready.

THE QUANTITY SURVEYOR.

A full exposition in quarto of the most approved modern method, by CHAS. HENRY SEARLE.

Part 6 is now ready. Single Parts, price 1/8 each, forwarded post free by the Author, 16, SOUTHWARK STREET, LONDON, S.E.

APPOINTMENTS WANTED.

YOUNG ARCHITECT, A.R.I.B.A. (by exam.), seeks ENGAGEMENT as DRAUGHTSMAN. Obtained bronze medal. Working drawings. Details. Perspectives in ink or colour. Town or country.—Box 16, Office of "The Builders' Journal."

GENERAL FOREMAN (38) seeks RE-ENGAGEMENT. Carpenter and joiner. Well versed in drawings. Practical in all branches. Good manager. Careful in variations. Good references. Town or country.—R. W., 477, Montague terrace, Mile End road.

ARCHITECTURAL DRAUGHTSMAN desires ENGAGEMENT. Tracer, colourist, details, working drawings. Tracings, &c., executed in evenings (at moderate terms).—Address G. WELCHMAN, 16, Carlton Road, Putney.

ARCHITECTS, BUILDERS, &c.—DRAUGHTSMAN requires SITUATION. Well up in plan work. Good colourist, tracer and letterer.—G. H. Foster's Newspaper Office, 86, Thornhill Road, N.

ARCHITECT'S ASSISTANT desires RE-ENGAGEMENT. Ten years' experience. Passed R.I.B.A. Qualifying Exam.—Address H. T. B. S., 3, Park Villas, Highgate, N.

ASSISTANT requires ENGAGEMENT in Architect and Surveyor's Office. Sixteen years' good experience in the best London offices. Proficient in all branches. Excellent testimonials.—D., 211 Northumberland Park, Tottenham.

ARCHITECT'S ASSISTANT, seeks RE-ENGAGEMENT. Ten years' experience. London and provinces. Good draughtsman. Competitions, perspectives, &c. First-class references.—G. L., 3, Handel street, W.C.

FURNISH BY GRADUAL PAYMENTS

ON

NORMAN & STACEY'S

LIFE ASSURANCE SYSTEM.

This System enables customers to obtain, by small Monthly Payments, the immediate enjoyment of a well-appointed and artistic home of their own at less cost than renting furnished houses or apartments. By special arrangement with one of the best Life Assurance Companies, the Furniture, in the event of the Customer's death, at once becomes the property of the surviving family without any further payment whatever.

Recognising the demand for a larger and more varied selection than can well be shown at one establishment, MESSRS. NORMAN & STACEY now **Supplement their own Stock** by giving their Customers the additional advantage of selecting their goods from some of the Best Wholesale Houses in each branch of the trade. Every Household Requisite supplied. Goods delivered free in private vans. Terms made to suit the convenience of the Customer.

NORMAN & STACEY, LD.,

118, QUEEN VICTORIA STREET, E.C.

SELSFIELD QUARRY.

Blocks of this very durable **SANDSTONE** put on rail at 1s. per foot Cube. Architects should visit this quarry, only 35 miles from London.

ADDRESS:

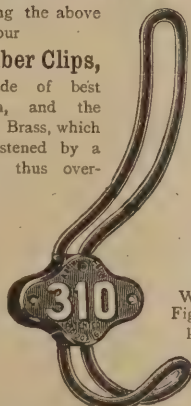
R. GUNTER, Old House, near East Grinstead.

Nearest Station, Kingscote, L.B. & S.C.R.

The "UNIVERSAL" SCHOOL BOARD HAT AND COAT HOOK.

We are supplying the above with our

Patent Number Clips, which are made of best Malleable Iron, and the Figures of Solid Brass, which are securely fastened by a patent method, thus overcoming the difficulty of painted figures, which soon become discoloured and indistinguishable; and the price will compare favourably with any similar article on the market.



Patentees and Makers:—

ALFRED BROWN & CO.,

CITY LOCK AND BRASSFOUNDRY WAREHOUSE,

81, Smallbrook Street, BIRMINGHAM.

WOOD-BLOCK PAVING.

(MR. WHITE'S SYSTEM).

For Churches, Schools, Offices, &c.

Estimates and full particulars on application to

THOS. GREGORY & Co.

WOOD PAVING AND STEAM JOINERY WORKS,

Clapham Junction, S.W.



G. BRADY,

MANUFACTURER OF

Revolving Shutters,

Sun Blinds, Window Guards, Hoists, Lifts, &c.

IMPROVED SWIVEL PARTITIONS

(Brady & Peace's Patent),

In Wood or Iron, for dividing Schools, Warehouses, &c.

WORKS—

BROWNSFIELD MILLS, Ancoats, MANCHESTER.

GLAZIERS' DIAMONDS.



ILLUSTRATED PRICE LIST ON APPLICATION.

BUSH & CHIPPER,
11, President St., Goswell Rd., E.C.

ESTABLISHED 18 YEARS.

APPOINTMENTS VACANT.

BOROUGH OF BURTON-UPON-TRENT.
BUILDING INSPECTOR.

The Corporation of the above Borough require the SERVICES of a competent person to act as INSPECTOR of NEW BUILDINGS and HOUSE DRAINAGE, and generally to perform the duties set forth in the schedule, a copy of which may be had from the Borough Surveyor.

The salary will be at the rate of £120 per annum, and the appointment will be terminable by a month's notice on either side.

The person appointed will be required to devote the whole of his time to the duties of his office, and to act under the direction of the Borough Surveyor.

Preference will be given to persons holding the certificate of the Sanitary Institute, or of the Association of Municipal and County Engineers.

Applications in the applicant's handwriting, stating age and qualifications, and accompanied by not more than three recent testimonials as to competency and character, must be delivered to me not later than TEN a.m. on MONDAY, the 25th instant, endorsed "Building Inspector."

Persons directly or indirectly canvassing members of the Council will be disqualified.

J. E. SWINDLEHURST, C.E.,

Borough Surveyor.

Town Hall,

February 6th, 1895.

THE BOARD of WORKS for the SAINT OLAVE DISTRICT, Southwark, requires the SERVICES of a FOREMAN of PAVIORS and SEWERMEN, at a salary of £2 a week.

Letters of Application, with not more than two testimonials, to be sent by the 22nd instant to the undersigned.

G. W. THOMPSON,

Surveyor.

Vine Street,

Tooley Street, S.E.

February 14th, 1895.

RENDLE'S

"INVINCIBLE"

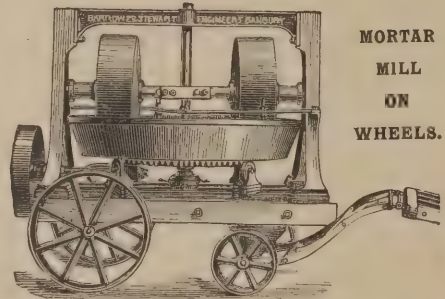
GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

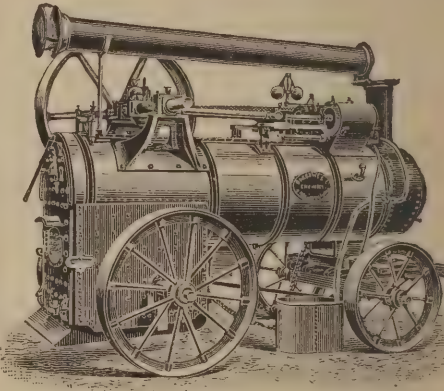
ASTRAGALS
OF
COPPER OR ZINC



COMBINED ENGINE & MILL
Occupies little space and is easily moved.



MORTAR
MILL
ON
WHEELS.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

CONTRACTS OPEN.

TO BUILDERS.

NEW BOARD SCHOOL, ASHFORD, KENT.

The Ashford School Board are desirous of receiving TENDERS for the ERECTION of a new BOARD SCHOOL, with MASTER'S RESIDENCE and OFFICES in Victoria road, Ashford, Kent.

All Builders who wish to Tender must send their names and addresses to Mr. H. J. JEFFERY, Architect, Ashford, Kent, on or before FRIDAY, 15th FEBRUARY next. They can obtain from him on and after TUESDAY, 19th February, on payment of a Guinea, a bill of quantities.

The plans and specifications can be seen at the Architect's Office during business hours on and after 8th FEBRUARY.

The deposit of a Guinea will be returned on receipt of a *bona-fide* Tender.

Sealed Tenders, endorsed "Tender for New Board School and Residence," must be received by me, the undersigned JAMES FRASER, not later than MONDAY, 4th MARCH next.

Neither the lowest nor any Tender will necessarily be accepted.

JAMES FRASER,
No. 87, High street, Ashford, Kent. Clerk to the Board.
January 17th, 1895.

TO BUILDERS AND CONTRACTORS.

TENDERS are invited for the ERECTION of a THREE HUNDRED QUARTER MALTING, within the Borough and City of Peterborough, and adjoining the Great Northern Railway.

Plans and Specification, may be seen, and quantities obtained, at our Offices, Eldon Chambers, Wheeler Gate, Nottingham, on and after FEBRUARY 18th inst.

Tenders to be delivered on or before the 27th FEBRUARY inst., addressed to Messrs. GILSTRAP, EARP & CO., Newark-on-Trent.

The lowest or any Tender not necessarily accepted. Great importance will be attached to time limit, and class of work hitherto done by firms Tendering. Particulars of Tenders will not be published.

EVANS & SON,
Architects.

February 6th, 1895.

S. MARY NEWINGTON, LONDON.

TO BUILDERS.

NEW BATHS AND WASHHOUSES.

The Commissioners for Baths and Washhouses are desirous of receiving TENDERS for the ERECTION of BATHS and WASHHOUSES, with the necessary Offices, in Manor Place, Walworth.

All Builders who wish to Tender must send their names and addresses to Mr. E. B. TANSON, Architect, 7A, Laurence Pountney Hill, E.C., on or before FRIDAY, the 22nd INSTANT. They can obtain from him on and after this date bills of quantities upon payment in cash of Ten Guineas.

The Drawings, Specification, and Form of Contract can be seen at the Architect's office during business hours, on and after Monday, the 18th inst.

The deposit will be returned after the Tenders are opened by the Commissioners.

The Builder will be required to sign the following declaration:—"We hereby declare that we pay to the workmen employed by us not less than the recognised Trade Union rate of wages in each branch of the trade."

Sealed Tenders, endorsed "Tender for New Baths and Washhouses," must be received by the undersigned not later than Five o'clock on TUESDAY, 5th March next.

Neither the lowest nor any Tender will necessarily be accepted.

By Order,
L. J. DUNHAM, Clerk to the Commissioners,
Vestry Hall, Walworth, S.E., Feb. 14, 1895.

TO BUILDERS.

TENDERS are invited for BUILDING VILLA RESIDENCE and STABLING at Rayleigh, Essex. Bills of quantities obtained on payment of Three Guineas, which will be returned on receipt of a *bona-fide* Tender, on making application to the Architect, Mr. JAMES THOMPSON, Cliff Town road, Southend-on-Sea.

Sealed Tenders to be delivered at the Architect's Office on or before THURSDAY, the 21st FEBRUARY.

No pledge is given to accept the lowest or any Tender.

Dated January 28th, 1895.

TO BUILDERS.

The Commissioners of H.M. Works and Public Buildings are prepared to receive TENDERS for the ENLARGEMENT of the HEAD POST OFFICE at Portsmouth.

Drawings, specification, and a copy of the conditions and form of Contract may be seen on application to the Postmaster.

Bills of quantities have been prepared for the use of the Builders by Mr. HARDCASTLE, of No. 5, Old Queen street, Westminster, and, together with forms of Tender, may be obtained at this Office, on payment of the sum of One Guinea. The sum so paid will be returned to those persons who send in Tenders in conformity with the conditions specified below.

The Commissioners do not hold themselves responsible for the accuracy of the quantities; nor do the Commissioners bind themselves to accept the lowest or any Tender.

Tenders are to be delivered before TWELVE o'clock noon, on TUESDAY, the 5th proximo, addressed to the Secretary, H. M. Office of Works, &c., 12, Whitehall Place, London, S.W., and endorsed, "Tender for Portsmouth Head Post Office, Enlargement."

H. W. PRIMROSE,
Secretary.
H. M. Office of Works, &c.
February 11th, 1895.

TO BUILDERS.

NORTH SURREY DISTRICT SCHOOL, ANERLEY, S.E.

The Managers are prepared to receive TENDERS for ADDITIONS to DORMITORY (Boys Side) and OFFICE FITTINGS at the School.

Copies of the specification and drawings can be seen on application to the Superintendent on the premises.

Tenders to be sent to me at the School, marked "Tenders for Dormitories, &c.," not later than SATURDAY, MARCH 2nd next.

The Contractor whose Tender is accepted must be prepared, if required, to find two approved sureties to enter into a bond (to be drawn up by me) for the due performance of his contract.

The Managers do not bind themselves to accept the lowest or any Tender.

H. J. CHALDECOTT,
Clerk to the Managers.

February 7th, 1895.

The Builders' Journal.

Vol. I., No. 3.

Tues., Feb. 26, 1895.

ILLUSTRATIONS.

The Royal United Service Institution—Whitehall Front	33	Portrait of Mr. Aston Webb	40
Ditto ditto Whitehall Gardens Front	35	Peverey	41
Mosaics from the Greek Church, Bayswater	36, 37	Portrait of Mr. E. W. Mountford	42
Mr. Walker in his Studio	37	St. Bartholomew the Great—New North Transept	43
St. Bartholomew the Great—New South Transept	38	Winchester Cathedral	45
Ditto ditto New North Transept	39	Metropolitan Assurance Offices—Entrance	46

CONTENTS.

Ewan Christian	33	St. Peter's, Eaton Square, and Sir Arthur Blomfield, A.R.A.	39	Winchester	45
Water at Last	33	Men who Build, No. 3—Mr. Aston Webb	40	Correspondence	46
Professional Dignity	33	A Chat with the President of the A.A.	42	Architectural Ironwork	47
Ourselves again	34	An Ancient Decorative Industry	42	The Labouring Men	47
The Acquisition of Workmen's Dwellings	34	Jean Francois Millet	44	"Where the Rude Forefathers of the Hamlet Sleep"	47
The Royal United Service Institution	35	avations at Medum	44	To Architectural Students	47
Bricks and Mortar	36				

The Builders' Journal.

Ewan Christian. At the ripe age of eighty years, full of honours, and with the best secular work he has ever attempted almost completed, Ewan Christian has gone the way of all flesh, and his host of friends in the Architectural world will know him no more. Mr. Christian's chief works were his church restorations, and he has restored more churches—under the Ecclesiastical and the Charity Commissioners, for whom he worked religiously for very many years—than any other six men in England. His principal restoration, if one would pick a solitary instance out of many hundreds, was unquestionably the restoration of Southwell Minster, and the rebuilding of its tower; but his staircase at the National Gallery, and the important additions to the building which have been for several years gradually growing to completion, and which will undoubtedly form a magnificent home for the National Portraits which have been buffeted about the world, to our great dishonour, will call him most to the memory of architectural London. We only hear of his death as we are going to press, time enough, however, to express our sorrow at the loss of such an eminent Church Architect, and such a polished gentleman. Mr. Christian is but another victim to the fearful weather of the past month. He caught a chill a few days ago, and in spite of all that medical skill and nursing could do, he succumbed through exhaustion.

Water at Last. THERE can be no two opinions over the welcome news that comes from the House of Commons debate of last Friday. The details under which the London County Council become possessed of the Lambeth Water Works Company are of not much importance, so long as the possession of this and every other water monopoly is obtained on

equitable terms, and we may safely leave it to the Select Committee to arrange matters fairly. But that the water monopolists are at last cornered is good news indeed. Of the constitution of the County Council, we have little pride; of its rabid political tendency, we have little hope; but the County Council is a better monopolist for the welfare of the community than a Limited Liability Company, and we welcome the thin end of a wedge which is going to place the manipulation of the City's water supply into the hands of the Municipality. We shall

Association who happens to be also the editor of this journal, all the other architectural journals, which usually send representatives to the meetings of the Association, formally absented themselves. Whom are they supposed to punish by these tactics? Possibly their own readers, who may think they have a right to expect some report of a paper which was considered by the meeting as an important one; certainly not the reader of the paper, who, they may take it on the best authority, is entirely indifferent whether his name appears in their columns or not, and would not have even been aware of their defection had not his attention been drawn to it."

We have never in our twenty years' experience of class journalism met with a more foolish and tactless admission. The obvious conclusions which men will draw from the stupid paragraph needs no further exposure by us, for the sore on the back of the editor's head is a very angry one we dare swear could we but see it. But of all this we care very little, and it interests us less. Our self imposed duty is to uphold the dignity of *The Builder* and to save its editor from falling again from the pedestal he should undoubtedly occupy. *The Builder* is, or is not, the leading Architectural journal in England. Its circulation is extremely limited, and perhaps there are not fifty individuals who religiously read it from beginning to end, but there is a severity and a profundity about it which forbids any antics with its reputation. It may be commercially unwise for us



THE ROYAL UNITED SERVICE INSTITUTE—WHITEHALL FRONT.

get better water, more of it, and it ought to cost us a great deal less than it does at present. There are other monopolies to follow.

Professional Dignity. THE Editor of *The Builder* has one grievance amongst many, which he has publicly commented upon in the current issue of his journal. He says: "It is amusing to note that on the occasion of the reading of a paper by an old member of the Architectural

to publicly uphold the reputation of our elder contemporary, but we are always honest in our convictions and fearless in our loves and hatreds, and our affection for *The Builder* is not to be dimmed by the erratic behaviour of its conductor. To get to the point of our keenest sorrow we regret that the reader of the paper to the young men of the Architectural Association did not leave it to us or to some one else to protect the etiquette of professional journalism. We loathe with a

dread loathing the spirit which induces proprietors of certain papers withdrawing their attendance from a meeting at which the editor of a contemporary is delivering the lecture of the evening. It is whispered to us that there be reasons for such abstention, and, although, we think of much, we do not listen to whisperings. *The Builder* is as much above any of its contemporaries in academic learning and professional prestige as the Sun is above the planet upon which mortals crawl, and its present Editor is, perhaps, the most able man who could be found to fill its chair, and, therefore, the keynote of its existence should be that of courteous tolerance to all its contemporaries. There should be no spitting and scratching and gnashing of teeth, which characterise the minions of most rival newspapers. They lie against each other in the most sublime fashion, they curl their lips and dip their noses when they pass each other in the public streets, and when these shortcomings commence to be shared by the principals of respectable journals, then it is high time that the conductors of "THE BUILDERS' JOURNAL" gave them a lesson in professional decency. The particular paper which was read by the Editor of *The Builder* before the Architectural Association was entitled "London Bridges Architecturally considered," and it appears *in extenso* in the current issue of *The Builder*. We wrote a personal letter to the author, asking the loan of the drawings which were exhibited during the evening, so that we might illustrate his paper; and this is his personal reply:—"In regard to my own paper at the Architectural Association, the other journals (in a fit of journalistic spite, I presume,) absented themselves from the meeting, a matter to which I am entirely indifferent; but the result of that is, that the paper will be published in *The Builder* only, and I decline to permit you to publish it, and if you reprint any part of it from *The Builder*, I shall obtain a Chancery Order to stop the sale of the paper." What courtesy! what goodness of heart! what dignity! As a prosaic matter of fact we were represented at the meeting, made shorthand notes of the business transactions and of the discussion which ensued, we did not report the paper itself, because it is customary for readers of papers before public audiences to hand their M.S. to the pressmen present, or otherwise to supply them with authenticated copies, and to that customary courtesy we depended for our matter. It looks as if the representatives of the other professional journals knew what was in store for them. However, back upon his pedestal we wish to see the editor of *The Builder*, he will be less ignoble in his proper place, and the friction of the world will irritate him less. The next time he addresses a professional meeting, we shall be there in force to report his every word, to defy his Chancery Orders and the other vapourings of a bearish disposition. For several years he has ridden rough shod over the arid plains of Architectural journalism, and his compeers have fallen back at his approach. But another Richmond is in the field, mounted on a modern charger, equipped with the latest devices of his craft, and fearsome of none. There must be an end to bluster and to bounce, else the snug little commercial enterprise of Catherine Street must be taught a lesson it is not likely to forget.

Ourselves Again. We are better able now to gauge the brilliant success of "THE BUILDERS' JOURNAL," and yet we are without much evidence of its popularity, which will reach us next week. From Scotland, from Ireland, from Wales, and from every county in England come letters of astonishment and praise, until we

are almost tired of reading the continuous flow of commendation and approval. One fact we are distinctly pleased to gather—that our advent will not materially affect those high-priced weeklies which, by their beautiful plates, have secured a permanent foothold—even if it is superficially small—in the appreciation of architecturally disposed individuals. Our good printing and our marvellous price, and the enterprise and capital which back them up, has carried us over the entire field of Architecture and Building, and we shall not stop until we can announce a class circulation equal to the combined circulation of all our high-priced friends put together. Architects of eminence have welcomed us. Provincial Architects who but seldom purchase our contemporaries, have become our good subscribers, and presently there will not be a single town in the United Kingdom where "THE BUILDERS' JOURNAL" cannot be found. Complaints too reach us of the inability to obtain copies. The inability will not exist if the applicant will merely order his copy from his bookseller or his bookstall, and see that he gets it. Any newsagent in the kingdom will procure copies from their wholesale house or Messrs. Smith & Son will have them on sale wherever they are wanted. Failing that, a Postal Order for three shillings and three pence sent to this office will secure the Postal delivery of a copy every week for half a year, but we much prefer that the copies should be procured through the newsagent.

A kind wish from NORMAN SHAW, R.A.

Yours very faithfully,
Norman Shaw

The Acquisition of Workmen's Dwellings. A BILL that should have a very material interest for the English Builder was ordered to be printed by the House of Commons on the 8th of this month. It resembles one of those inventions whose simplicity causes us to wonder why we had not forestalled the author by a previous production. Mr. Wrightson, who was returned to Parliament for the first time at the last General Election as the Conservative Member for Stockton-on-Tees, and who is one of the partners in the firm of Head, Wrightson & Co., profiting by the principle of Mr. Balfour's Irish Land Purchase Act, has drafted a measure with a similar objective for the working classes of England and Wales, who may wish to be assisted to an acquisition of their own dwelling-houses. His scheme has the exceptional merit of combining two generally opposed political elements. It is both socialistic and individualistic. For while it involves State aid, it demands thrift and industry from the State constituent. Mr. Wrightson is thus a Parliamentary reaper, who, having gone out to reap, has not stayed, like many of his fellow-legislators, to unravel the cornstalks. He has seen quickly and used quickly his opportunities. Two diverging political currents have been ingeniously turned into one broad river that will, we think, carry us a long way towards the solution of a great economic problem.

Mr. Charles Booth's "Life and Labour of the People," which is a sort of doctor's melascope that empowers us to see into the very stomach of the housing question in the

Metropolis, and to photograph and map out its diseased parts, gives us admirable guidance on the subject that Mr. Wrightson has taken in hand. Indeed, it would appear that the member for Stockton has allowed himself to be largely influenced by it. The book tells us that a big proportion of working class people in London—and we may presume that the same thing holds good of the population in other large towns and cities—is averse to the corporate life of the block system, and it asks landlords to pause before clearing away small houses and erecting large blocks. It happens, however, by reason of the provisions of the Housing of the Working Classes Act, 1890, that the landlord is not always able to avoid the restriction of the small house, and naturally, in crowded neighbourhoods, where space is valuable, he makes the most of what is allowed him between the earth and the sky. The four-storied block will pay him better than the two-storied cottage, and the philanthropic instinct, if it be present, bends to the commercial consideration. The Act of 1890 is, therefore, favourable in certain districts to the existence of the block and to the elimination of the small house. Another cause which operates in the latter direction, not only in London, but also in the more pretentious country towns and provincial cities, is the increasing demand for factory and workshop space. The dwelling houses in courts and alleys are mostly held on leases that are near expiring; the buildings are old and very often seriously delapidated; and as re-erection accompanies the issue of a new lease, and the sites are adjacent to industries, workshops, factories and offices, from the fact that they are more valuable and easily let, frequently, in such situations, replace the dwelling-house. This is a process that will be accelerated in the metropolis by the new building Act which came into force this year; for many examples of the class of house to which we refer are all front, and do not afford the rear space and facilities for the opening of windows into the external light which have now become obligatory in domestic habitations. This change from dwelling-house to workshop and office must, in the course of time, displace in certain centres a considerable number of the working classes. The proven unsuitability of the block system and this continuous displacement, to say nothing of the extra provision that the future will need, owing to excess of births over deaths, convert the erection of the small house into a pressing, if not imperative, desideratum. There can be no question as to the popularity of the small dwellings with the working classes. Investigation, such as Mr. Booth has conducted, and the experience of companies like the London Provident, place it beyond all doubt.

It is, then, this small house which the working classes desire that Mr. Wrightson's Bill will enable them to purchase. It is a short measure of six sections. Under its provisions the local authority may borrow money from the Public Works Commissioners at not less than $3\frac{1}{2}$ per cent. to aid workmen, or any person whose income does not exceed £3 per week, to purchase the freehold or leasehold interest (the latter must have at least 70 years to run), in the dwelling-house in which he resides or intends to reside. Advances, however, are not to be greater than an eighth of the rateable value of the district in which they occur, nor is any sum exceeding £150 to be advanced to any one workman, nor any sum to any one workman in respect of more than one dwelling-house. To this extent the Act is socialistic; but there is a provision in Section 3 which clothes it with a contrary character. This provision calls upon the working man, as a condition of the advance, to contribute one-fourth of the purchase money, the whole of which must be repaid within 30 years

There are also provisions governing insurance, sale, sub-letting, overcrowding, and employment carried on in the house by the occupier. Failure to keep up the repayments of the money advanced invests the local authority with the right to sell as it may deem desirable, and if the proceeds of such sale do not cover the advance and attendant expenses, the balance unpaid is to be treated as a debt due to the local authority and is recoverable accordingly. It will be noticed that the proviso as to the length of the leasehold interest purchasable with the advance, excludes from the operation of the Bill a very large class of existing property. The effect of the Bill, as we have said, is of material interest for the builder. It will confront him with an extensive demand for a special kind of dwelling, somewhat similar to the freehold houses which are owned by American workmen, and which are so marked a feature outside the towns and cities of the United States. Before it gets through the Legislature, Mr. Wrightson's Bill will doubtless meet with a great deal of criticism, and in some particulars, such for instance, perhaps as the allocation of the working expenses of the Act, may be amended; but it will hardly encounter serious opposition. It has the approbation of all parties in the House of Commons; we have, in fact, the best of grounds for the assertion that, if not in this, at least early in next Parliament, be the party in power Liberal or Conservative, the Bill will either be adopted as a Government measure, or the Government will do what, for all practical purposes is the same thing, assist in its passage. Its becoming law will mean a wanted and widespread stimulus to the building trade, the relief of congested populations in big towns and cities, the attachment of the rural workman and his children to the country, and consequently the stoppage of their migration to the already overcrowded industrial centres. Above all, it will benefit or have the indirect tendency of benefitting those poorer sections of the community who think, as Mr. Ruskin has terribly said, "if there is a next world they will be damned, and, if there is not, they are damned already."

THE ROYAL UNITED SERVICE INSTITUTION.



THE Royal United Service Institution, it must be acknowledged, has had in its

later years a rather chequered existence. Founded in 1831, when William IV. was king, and receiving its charter of incorporation in 1860, at the hands of Queen Victoria, it has for a long time past had its abode in two dull, dingy, and

rapidly-decaying buildings—the entrance to which is shown in our initial letter—in what was formerly Whitehall yard, but is now dignified by the title of Horse Guards avenue. In 1871 the Crown gave the institution notice to quit premises which were ill-suited alike for the purposes of meeting and for the display of its unique collection of naval and military trophies. Thereafter the institution lived year after year under apprehension of eviction, and under deadly fear of having to seek something akin to Land League shelter for the warehousing of its service *bric-à-brac*. A sense of security was, however, restored when, at the end of 1890, her Majesty paid the highest

possible compliment to the work of the institution by granting it the use of the Banqueting Hall—all that is left of the once famous Whitehall Palace—for museum purposes. By a stroke of good fortune the council were also able to secure a long lease of the site once occupied by Dover House stables, and adjoining the southern end of the Banqueting Hall. Here they have erected as there future headquarters a building which, while in no sense an extension or continuation of the Banqueting Hall—for it was specifically directed that the latter was neither to be architecturally compromised nor structurally altered—has the advantage of being next door to, and communicating with, this famous and historic building.

The new institution, designed by Messrs. Aston Webb and Ingress Bell, was opened by the Prince of Wales last week. Constructed of brick, Portland stone, and granite, and fire-proof throughout, the new building has its principal or western front towards Whitehall, but it has also an important eastern elevation towards Whitehall Gardens, on which the lecture theatre abuts. The latter, which is on the ground floor, is spacious and lofty, and will be capable of comfortably seating

There is a passenger lift to the principal floors, to say nothing of "coffee" and coal lifts, while the electric light has been installed throughout. Altogether the new building is about as complete and as agreeable a contrast to the institution's former headquarters as could be conceived. Mr. W. S. Frith is responsible for the sculptured work, and the building itself was entrusted to Messrs. Mowlem & Co., who have carried out their work most satisfactorily.

While the members of the Royal United Service Institution are to be specially congratulated upon their migration, the public will probably take no little interest in the event, since, coincident with it, they have, at a cost of sixpence, access every week-day, except Wednesdays, to innumerable naval and military treasures. Hitherto, it has been possible to view the institution's museum by writing to the secretary for his permission, but in the crowded rooms of Whitehall yard a due appreciation of the closely-packed relics was all but impossible. Now, however, there has been a sifting of the wheat from the chaff, and all that is best and most valuable in the vast store which the institution has accumulated has been removed to the



THE ROYAL UNITED SERVICE INSTITUTION—WHITEHALL GARDENS FRONT.

nearly 400 persons. The lectured, it is worth noting, are not to be staged at that precipitous angle which scholastic fashion has hitherto favoured, and Alpine experience will no longer be an essential for obtaining a seat, as was the case at the old institution. On the main floor, which is on the level of the neighbouring Banqueting Hall, is a room intended for the use of the council, and other apartments which will be utilised for secular purposes. In the council room, as in other parts of the building, wood-carvings, which are reputed to have formed part of Whitehall Palace, have been appropriately utilised. Tradition has it that when the palace was destroyed by fire Sir John Vanbrugh, famous as the architect of Blenheim, rescued various tit-bits from the *débris*, and employed them in the construction of a house on the site which the institution has lately quitted. On the first floor there is a large newspaper room, the length of the Whitehall frontage, and behind it and over the theatre, a handsome and well-lighted library, capable of accommodating about 30,000 books. Other floors furnish writing, reference, and topographical rooms.

Banqueting Hall, there to be seen to the best advantage. In these circumstances, and in view of the fact that the preparation of the hall and its crypt, together with the new buildings, has cost the Council about £25,000, the public will hardly grudge the small charge levied for admission. Built by Inigo Jones, the Banqueting Hall itself is a structure worth more than the money to visit. Historically, its greatest claim, probably, is that through one of its windows Charles I. was led forth to execution, and by a singular coincidence, yesterday's private view was fixed on the anniversary of that event. Artistically, the feature of the building is its ceiling, which is embellished with the matchless work of Rubens. It is said that Van Dyck was to have executed a series of mural paintings for the hall, representing the ceremonies of the Order of the Garter, but the fact that this work was never carried out probably made it the more easy for George I. to convert the building into a Chapel Royal—a purpose which it served for many years. Some 111 ft. in length, and 55½ ft. both in width and height, and possessing an excellent light, the hall makes an ideal museum.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
26th February, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE Council of the Association of Municipal and County Engineers have just decided upon several provincial meetings. It is intended to pay a visit to Stockport on April 27th, where an important sewerage scheme is now being carried out according to the plans and advice of Mr. A. M. Fowler, of Manchester. The main sewer is 7 ft. in diameter, and settling-tanks and 95 acres of land are provided for treating the sewage. The main sewer, which possesses the novel feature of crossing under the river no less than four times, is laid at a depth ranging from 30 ft. to 60 ft. Other interesting items on the programme will be the inspection of new steel and other bridges. May will be a busy month. The members will assemble at Brighton on May 4th, at Cardiff on May 11th, at Plymouth for two days' visit to important works on May 17th and 18th, and in Manchester on 25th of the same month, when the Thirlmere Waterworks will be inspected.

MEMBERS of the Society of Architects assembled at St. James's Hall on Tuesday night, under the chairmanship of their president, Mr. E. J. Hamilton, who had the support of Sir Francis Jeune, Archdeacon Farrar, Canon Browne Mr. Wyke Bayliss, Mr. G. Candy, Mr. Atherley-Jones, M.P., and Mr. Montefiore (the secretary). According to the Chairman the growth of the Society had been remarkable in more senses than one, for its 500 members were scattered all over the globe. A high tribute to the profession fell from the Archdeacon of Westminster, who described architecture as the handmaid of religion, for its greatest triumphs had been wrought in the service of the Church, while architects worked hand-in-hand with the servants of religion. The postprandial oratory, however, was not wholly confined to this one subject, and



MOSAIC FROM THE GREEK CHURCH,
BAYSWATER.

Professor Banister Fletcher, in proposing "The London County Council," was not speaking architecturally when he declared that the body in question would make London the first city in the world. Satisfaction was expressed that the Bill for the Registration of Architects which Mr. Atherley-Jones was promoting had been read in Parliament.

THE Dean and Chapter of Canterbury Cathedral, and representatives of the Consistory of the French Protestant Church in the crypt, have at length come to an understanding as to the removal of the French Church into the more lofty and lighter portion of the crypt, known as the Black Prince's Chantry. The Consistory having accepted the amended plans for the fitting up of the chantry, the alterations will be forthwith carried out under the direction of Sir Arthur Blomfield, A.R.A., and will include the removal of a modern wall, which has long been regarded as a barbarism.

MAIDWELL HALL, Northamptonshire, the residence of Mr. Reginald B. Loder, was last week totally destroyed by fire. An estate workman was employed in nailing felt to the inside of the roof to keep out the cold and draughts. The man accidentally knocked over the candle with which he was working, the felt became ignited, and in a few minutes the flames had spread along the roof to half the house. Only three small rooms at the north-east corner of the building were saved from the flames. The house was built in 1637, and was restored by the late Sir Robert Loder in 1885. It was a three-storey building, and measured 150 ft. by 120 ft. It was rich in oak panellings and carvings, all of which were destroyed. The furniture is damaged only by removal. The loss is between £15,000 and £20,000.

Two sets of public baths are in course of erection at Leeds, from plans by Mr. Walter Hanstock, of Batley. At the baths in Kirkstall road there are to be two main entrances, one to the first-class and the other to the second-class swimming bath. Between these entrance-doors is the office. Above the office is the manager's house, and to the rear the laundry. Twenty slipper-baths are to be provided, five of which will be set apart for ladies. All these different baths are arranged on one floor level. The size of the second-class bathroom is 89 ft. by 45 ft., with water level 75 ft. by 30 ft. On both sides and at the end of this large room is a spectators' gallery, which will accommodate 200 or 300 people. Under the gallery are the dressing-boxes, which, when finished, will be divided from each other by slabs of polished slate. The bath has a concrete shell; the sides will be lined with white glazed bricks, and the floor with glazed white tiles, with the usual couple of black bands. The side of the room containing the first-class swimming bath is 73 ft. 6 in. by 33 ft. 6 in., with a water measure of 63 ft. by 24 ft. Here there will only be a gallery on one side, underneath which will be the dressing-boxes, polished white marble slabs being used for the divisions. Both the rooms containing the swimming baths will be lighted by windows at one end and by skylights. On the ground floor beneath all the bathrooms is a crypt, in which all the numerous water and steam pipes are exposed. Plaster and woodwork are avoided throughout the building, and thus the cost of repairs is reduced to the minimum. The external walls of the Kirkstall road building are faced with red pressed bricks. The Union street baths are built on exactly the same principle. The contracts in respect of the Kirkstall road baths amount to £6,982 12s. 4d.; this does not include the cost of the land. The total amount of the contracts in regard to the

Union street baths is £6,686 16s. 1d. Both sets of baths will be opened in June next.

THE modern stained glass window is described by Mr. Day as produced by painting on white (clear) glass in colours, and then firing them in—a process more appropriately termed enamelling. Its origin dates from the sixteenth century. The objection to it is that the painted colours have not the strength or brilliancy of pot metal, and the enamel is not lasting. Work of this class done in the seventeenth century only remains in a state of ruin and shabbiness. The enamel is simply finely powdered pot metal applied to the glass with a brush, and then fused into it. To make the fusion more ready, a flux of borax is mixed with the powdered pot metal, but this lessens the adhesive properties of the enamel. Changes of temperature cause the glass and enamel to expand and contract; this they do at different rates, with the result that the latter chips off. The old brown paint of the mediæval artist was not of this character; it was actually made to sink into the glass it adorned by intense heat, and remained there a part of the glass itself, not merely an adhesion to the surface.



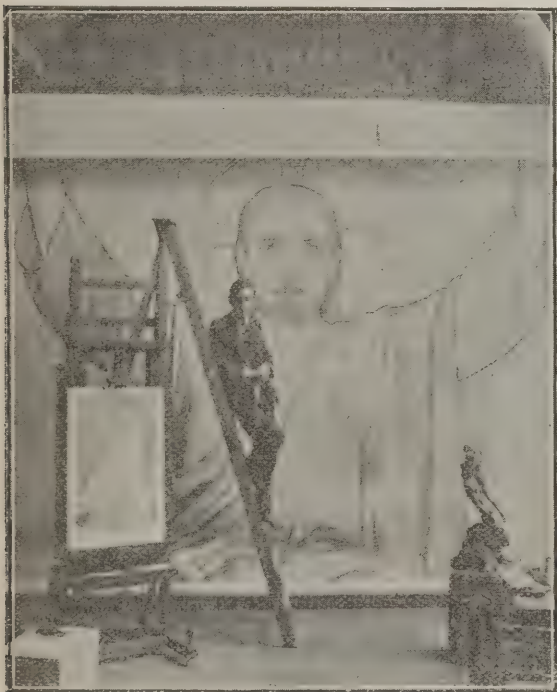
MOSAIC FROM THE GREEK CHURCH,
BAYSWATER.

THE Society of Arts announce an offer of (1) a prize of £20 or a gold medal for the best reproduction of a selected picture by a photogravure process. (2) A prize of £10 and a silver medal for the best photographic negative of a selected picture suitable for reproduction by photogravure process. Applications for orders to photograph the "selected picture"—Mulready's "Choosing the Wedding Gown," at South Kensington Museum—must be made to the secretary before March 30th next. The plate on which the photos are to be taken must be 12 in. by 10 in., and the finished picture of the same size. The competition is limited to British subjects. Full particulars are given in No. 2,204 of the *Society of Arts Journal*.

ON Jan. 4th, says *The Architect*, Messrs. Hollams, Sons, Coward & Hawksley wrote to Mr. Alderman Vaughan Morgan, treasurer of Christ's Hospital, on behalf of Sir H. W. Peek, explaining that there appeared to be a general opinion that the proposed removal to Horsham was undesirable, and offering the hospital 100 acres of well-timbered land at Wimbledon, with a frontage of about two-thirds of a mile on Wimbledon Common, on moderate terms. They added that Sir Henry Peek would be willing to entertain a proposal for payment of a considerable portion of the purchase money by way of permanent rent-charge, and that he was actuated rather by a desire to benefit the charity than to dispose of the property, which was obviously suitable for immediate building operations. To this Mr. R. L. Franks, clerk of Christ's Hospital, replied on January 9th, stating that the offer had been submitted to the Council of Almoners, and that he had been directed

to decline it. Messrs. Hollams, Sons, Coward & Hawkley wrote to Mr. Franks on January 18th, complaining that no reason had been given for declining the offer, and adding that Sir H. W. Peek was prepared to sell the property at Wimbledon at the same amount per acre as was paid by the Mercers' Company, with the sanction of the Charity Commissioners, for the site of St. Paul's School at Hammersmith, and that he would, although he felt it to be a very undesirable property, relieve the charity of the property at Horsham for such sum as valuers mutually appointed, or their umpire, might fix as the value. He would also, subject to deduction of the value of the Horsham property to be thus acquired by him, accept payment of the whole of his purchase money by way of perpetual rent-charge, following the precedent sanction by Parliament for compensation to Lord Spencer from the inhabitants of Wimbledon. The firm added that this course would enable Christ's Hospital at once to agree with St. Bartholomew's Hospital in respect of a substantial portion of the Newgate Street site, payment for which would provide funds for the requisite new buildings for the school, and, in the meantime, there would be two large houses in which part of the work could temporarily be carried on. To this Mr. Franks replied on February 6th, stating that the letter had been read to the Council of Almoners, and he was instructed to reply that the Council, having unanimously decided to build the schools at Horsham, could not re-open the question. Sir Henry Peek, in another letter, says that he still hopes for the sake of the future of the school that a better site than Horsham may be obtained, and that he cannot understand the inertness of the Charity Commissioners in the matter.

WE have had the pleasure of a visit from Mr. Arthur G. Walker, the artist of the mosaics, in the dome of the Greek Church at Bayswater, and whose very clever work has been represented in our two pre-



MR. WALKER IN HIS STUDIO.

ceding issues, and is completed in the present one, by means of the half tone blocks made from photographs of the actual mosaic panels. Mr. Walker has explained to us the conditions under which he obtained the commission for this work—conditions, which, invariably lead to the wrong man getting the praise for work he never did. It appears that

Mr. Mecenero was "merely" the contractor for the mosaic work, and obtained the contract on the merits of a sketch which Mr. Walker made for him. Mr. Walker was straightway commissioned by Mr. Mecenero to prepare the designs, and how, under such conditions, such good work has resulted is to us a conundrum. On this page is a picture of Mr. Walker in his studio, engaged upon the cartoon of our Lord, which forms the centre feature of the scheme.

ON Saturday Lincoln's Inn Fields reverted to the public for all time, thanks to the exertions of the County Council. How the pleasaunce was filched from the general community and passed into private hands is one of those mysteries which nobody has ever been able to find out. But it did; and for long years—at a time, too, when it was perhaps, even more wanted than it is now—it remained closed to all but a select few. Henceforth it will be free to the world. The Square forms part of some 20 acres of meadows which were turned into a building estate in the year 1657, and what were formerly the mansions of Prime Ministers, Lord Chancellors, and nobility of every degree, are now split up into innumerable chambers and offices. Major Sexby, the chief officer of the Parks Department has, in accordance with his usual custom, prepared an admirable history of the Gardens. The chronicles show that in the early times the Fields were the scene of many executions, and that even now the Square teems with buildings of historic interest. On the east side of the Square is an approach from Chancery Lane, the gateway of which bears the date of 1518. Over this red-brick portal Oliver Cromwell lived for some time, and tradition relates that Ben Johnson worked as a common bricklayer in the erection of the adjoining wall about 1617. Milton, it is stated, moved, in 1645, from Barbican to a smaller house in Holborn, which opened backwards into Lincoln's Inn Fields. The list of names which have made the Square famous is a lengthy one, and includes several Lord Chancellors, Chief Justices, and Sir William Blackstone among the legal world, the celebrated Duchess of Marlborough, John Locke and William Pitt. Nell Gwynne lodged in Lincoln's Inn Fields when her first son was born.

THE inn itself derived its name from Harry Lacy, Earl of Lincoln, in the time of Edward I.: and before him there was a monastery of the Order of Black Friars here near to "Oldbourne," which is Holborn. The ancient name of the spot was "Fickets Field," and in 1657 it was divided into two parts—that on the east called "Cup Field," and that on the west called "Purse Field." Quarrels were always taking place as to the right of entry and of pleasure, but the lawyers stuck to their rights on behalf of "the clerks of the Chancery, apprentices, students of the law, and citizens of London." One Roger Leget tried to drive these classes out of the space with "iron engines called caltrappes, privily laid and hid about."

This is an implement consisting of a ball of iron or wood, with iron spikes stuck in it, justly called "the devilish calthrop"; and things must have gone pretty far when the Fields were strewn with these amiable inventions. The nefarious Roger, however, was sent to the prison of the Fleet, "there to expect the King's grace," which he doubtless afterwards got pretty hot; and

being once well walled in with fair mansions and offices, the "Cup Field" and "Purse Field" were brought at last into "such sweetness, uniformity, and comeliness as they could possess" by no less a person than Inigo Jones.

It was said that the famous architect, in laying out the square, gave it the precise area of the base of the Great Pyramid of Egypt, but this is a mistake. However, without any such fanciful measurement, the spot bristles with interest. An old rag-and-bone shop at the south west corner, pointed out as the veritable Old Curiosity Shop of Charles Dickens, links it, as it were, to modern romance. By many a memory it belongs implicitly to British history. The fourteen conspirators who plotted to assassinate Queen Elizabeth and set free Mary Queen of Scots were executed here. It was known as the Babington Plot, and they were all "hanged, drawn, and quartered on a scaffold of timber in Lincoln's Inn Fields." In 1683 Lord William Russell was executed here on the charge of being concerned in the Rye House Plot. Later on the place became a haunt of mendicants and bad characters, who asked alms by day and robbed at night. The "Mumpers," and "Rufflers" of Lincoln's Inn Fields were, indeed, only too well-known, and Gay, in his "Trivia," warns the citizens against passing here by night. At this time the grounds lay open, but in 1733 a boy exercising a horse rode over the Master of the Rolls, and the Law vindicated its dignity by getting a rate levied and putting up the iron railings which have since too effectually made the green precinct a forbidden paradise to the children of the neighbourhood.



MOAIC FROM THE GREEK CHURCH BAYSWATER.

For some time past the question of strengthening their organisation has been under the consideration of several of the leading Master Tradesmen Associations in the larger cities and towns in the country. The movement had its origin with the Edinburgh Master Builders' Association, who proposed that the various employers' organisations throughout the country should be affiliated much after the manner of the existing operatives' societies. With the object of bringing the proposal under the notice of employers in Dundee a deputation consisting of the president, vice-president and another member of the Edinburgh Association visited the city the other day and met the members of the Dundee Builders' Association, which is composed of masons, joiners and plumbers. They fully explained their proposals, and afterwards, says the *Dundee Advertiser*, an interchange of opinion took place. It was then decided that a special meeting of the Dundee Association should be held to consider the matter. This meeting was held in Mathers's Hotel. There was a large attendance, and Mr. Thomas C. Stocks, the president, occupied the chair. General sympathy was expressed with the proposal of the Edinburgh Association, and the meeting decided to give it their warm support. In accordance with this resolution,

the following deputation was appointed to attend a meeting of representatives of Master Associations to be held in Glasgow shortly, when steps are to be taken to form an organisation on the lines indicated: Messrs. T. C. Stocks, J. B. Hay, Thomas Macaulay, William Bennett, D. P. How and Thomas Craig. Mr. W. Farquharson was also elected to attend the meeting as representing the master plumbers, and it was further agreed to ask the master plasterers to send a delegate. The proposal to have a forty-eight hours' week, which is at present agitating trade circles in the Metropolis, was also under consideration. It was decided unanimously to resist the movement, the Association being of opinion that it was in the interests of the public, as well as of those more directly concerned, that the fifty-one hours' week should be maintained.

PETWORTH HOUSE is one of the most interesting country seats that can be found in the South of England. Standing in the midst of an undulating and well wooded park, fourteen miles in circumference, it occupies the site for an ancient castle, built in the reign of Henry I. For five centuries it was in the possession of the Percy's, Earls of Northumberland, the heroine of that tragic episode, in which her second husband, Tom Thynne, of Longleat, was murdered by Count Königsmark at the corner of the Haymarket. The far from disconsolate widow, three months later, married the "Proud Duke of Somerset," who raised the greater part of the vast edifice that now looks over the Sussex Weald. The only child of this union, a daughter, carried the mansion and the estates into the Wyndham family, of which the Earls of Egremont were for about a century the distinguished heads. On the death of the fourth and last Earl, in 1843, the property was left to the present Lord Leconfield's father, Mr. George Wyndham, who was raised to the peerage. Petworth is famous for the magnificent paintings that line all its stately chambers, and illustrate every period and school of art from Andrea del Sarto and Van Eyck to Turner and Leslie. Grinling Gibbons adorned the dining hall with his choicest carved work, and the great staircase was decorated in the most approved style of the eighteenth century by the Frenchman, Laguerre. Royal visitors in plenty have been entertained in this noble dwelling, but not the least remarkable party was that which met here in 1814, and included the Prince Regent, the Czar, the King of Prussia and other illustrious allies.

We are sorry that at present we cannot continue our remarks upon Professor Aitchison's lectures to the Students of the Royal Academy. It appears that the copyright of these lectures—at any rate, we are told so—is the property of *The Builder*, from which we took the substance of the lectures. We are led to believe that this copyright has been purchased, but it is our intention of offering an advanced price over our contemporary, if by that means the copyright can be destroyed, and the lectures thrown broadcast over the land for the benefit of all. We are requested by our contemporary,

whose position as the leading professional journal has been most seriously shattered by our wonderful success, and who, no doubt, has been clever enough to acknowledge it, to admit, that the resumé of the Institute papers published in our last number was taken from its pages, and we, in the best possible good nature, make the admission.

CONCERNING FANS.

THE fan is not made to say much in England. It says far more in Spain, and as an instrument of conversation is second only to the tongue, and, perhaps,



ST. BARTHOLOMEW THE GREAT—NEW SOUTH TRANSEPT.

superior to the eyes. But it is in Japan that the fan has attained its highest development as an accessory of life and an essential of civilisation. There the fan is a much more serious object than it is in Europe. Since the sixth century it has been a part of the national costume. Formerly, every fan belonging to every rank had its meaning, and was used in a particular way, according to a strict code of etiquette. The flat fan had various shapes. The one familiar to us, the folding fan, or *agi*, is said to have taken its shape from the sacred cone of Fusi-yama. Certainly, the *agi* were formerly used as Court fans, and were hung with silken

flowers, and every great family had its peculiar flower and hue, so that the fan really served the purpose of the armorial coats of Europe. The fan, too, had its place in war. The war fan, invented in the eleventh century, was made of iron and leather—no coquette's toy this—and was carried by the commander, perhaps partially as a shield and partly for signaling. Folding fans served the purpose of ensigns. Naturally, the fan held a conspicuous place in the religious ceremonies, and the *mita agi*, the giant fan, was carried in processions in honour of the sun goddess. The fan has its place in religious exercises still. Preachers accentuate their points by sharply opening and shutting their fans. We have heard of the lily-white cambric handkerchief being effectively used for a similar purpose by English divines of the earlier half of the century. But the handkerchief has given way to the embroidered stole now. Art is employed on fans in Europe, but in Japan they are made the medium of literature also. There are album fans on which poems are written, and many an old legend is perpetuated pictorially on them. Japan is becoming scientific and utilitarian, so it is not surprising that of late, fans have been made to disseminate knowledge by having maps of the provinces engraved on their surfaces. These fans are probably used by Government functionaries, and most likely in the schools. For all classes have fans peculiar to themselves, dancers, jugglers, children, even dolls. The tea fan was formerly used as a tray for handing cake. Another domestic fan, of a humbler sort, is the strong flat paper one used as a bellows for the kitchen fire of charcoal. There is a water fan made of bamboo, to be dipped in water for the sake of coolness. There is the revolving white fan, which whirls around its stick; and there is a wicked fan whose case contains a dagger. The fan punctuates Japanese life in all its stages. It is, indeed, looked upon as the emblem of life. The rivet is the start, and the spreading surface the diverse paths widening out into futurity.

MESSRS. DENNY, MOTT & DICKSON, of 165, Fenchurch Street, London, teak and general timber importers and merchants, have opened a branch house at Queen's Buildings, 11 Dale Street, Liverpool, under the management of Mr. Charles Temple Greene.

THE old hall at Whiteley, near Newcastle-on-Tyne, is about to be converted into a hotel, and the estate, with the exception of five acres surrounding the mansion, will be converted into building sites.

New shops have just been built on the west side of Briggate, Leeds, from designs by Mr. E. J. Dodgshun, of that city. The buildings are three stories in height, and Elizabethan in style, the facades above the shop level being of stone and terra-cotta.

THE Board of Works has obtained possession of nearly all the property adjoining Westminster Abbey on the site desired by Mr. Shaw-Lefevre for a mortuary annexe to the cathedral. There remain two houses, one with a lease of twelve months to run, the other still for ten years in the occupation of the tenant. The work of demolition will shortly commence.

ST. PETER'S, EATON SQUARE, AND SIR ARTHUR BLOMFIELD, A.R.A.

IN the descriptive sketch of Sir Arthur Blomfield's career, in our first issue, we specially remarked upon his enlargement and adornment of St. Peter's, which we characterised, and which we are happy to characterise again, as a splendid piece of work. There are those, however, who differ with us, and one of our correspondents addressed to us a criticism which was so trenchant that—although from the nature of the communication we are compelled to withhold the writer's name—we felt compelled to put it into type, and to invite Sir Arthur Blomfield to reply to it, not in the nature of an anonymous criticism, which of course it was not, but by way of explaining away a contention which is not peculiar to the gentleman who addressed us. The criticism which we forwarded to Sir Arthur Blomfield was the following:—

"SIR A. BLOMFIELD has done, no doubt, and is doing, very fine work. But surely his work at St. Peter's, Eaton Square, is to be blamed rather than praised. I mean that to praise the inferior work of an able man does so much harm. Sir A. W. Blomfield's treatment of St. Peter's seems to me a mistake from the beginning. A fine Classic portico—and the style all through of the original church utterly opposed in feeling to Gothic—it was a great mistake, and a failure, to graft on it any sort of type of Gothic. Money there was without stint. There was a fine opportunity to show how a great Classic temple might be a Christian church. There is no dignity, and little, if any, artistic effect in what Sir Arthur has done here. Any inspection of the church, inside or out—especially inside—makes me sorry. The re-casting Architect has missed his way, and has missed his chance. My own feelings—with all my admiration for Sir A. W. Blomfield's successful work—is that St. Peter's, Eaton Square, only brings him disgrace. In the interests of Art, the recasting of St. Peter's should have been condemned."

And this is Sir Arthur Blomfield's vindication of his work:—

To the Editor of "THE BUILDERS' JOURNAL."

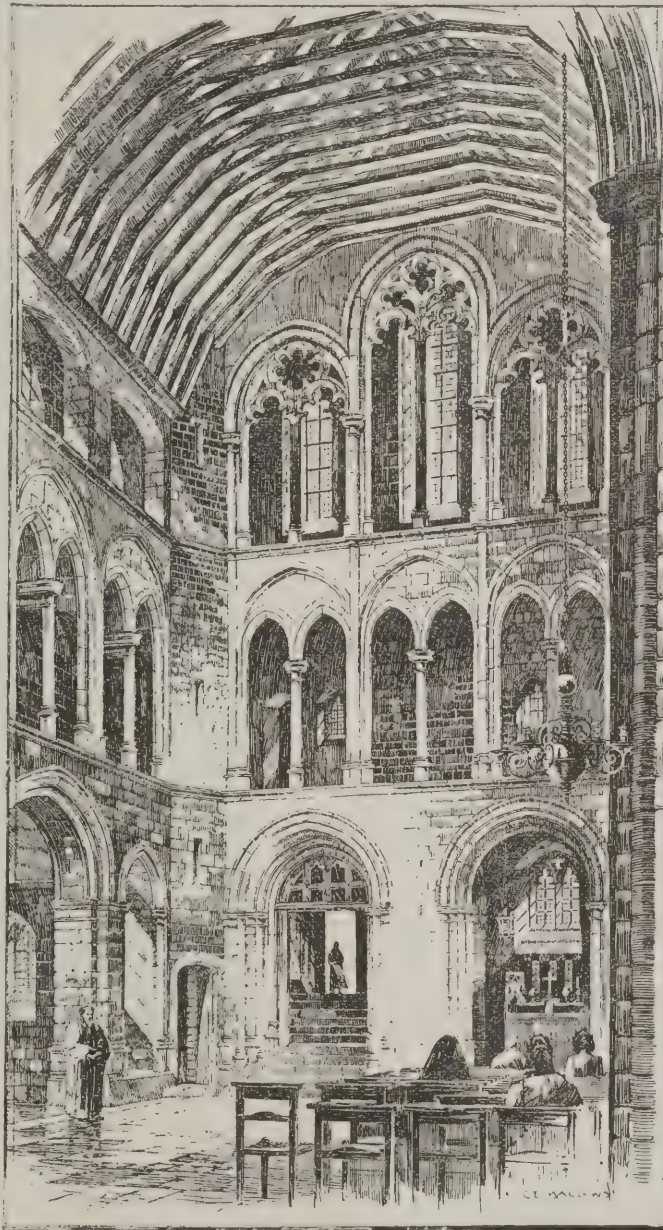
February 21st, 1895.

DEAR SIR,—I am much obliged to you for so courteously letting me see the anonymous criticism which you sent me on my work at St. Peter's, Eaton Square. So far as the writer bases his remarks on questions of taste and architectural propriety there is nothing to be said; arguments on such matters are notoriously useless. My comfort must be that, if there are many people who condemn my work, there are plenty of others, including (I am glad to know) many entitled to speak with authority on questions of Art, who take a diametrically opposite view. It is also gratifying to me to know that some years' later my friend, Mr. G. E. Street, treated the Guards' Chapel, in Birdcage Walk, in precisely the same spirit, though I need hardly say with far greater skill and knowledge than I could pretend to, and (I may add), with far larger means than I had for a much larger work.

When, however, the writer comes to

matters of fact, it is evident that either his memory is defective or he never saw the interior of the church before the alterations. It was simply a vast square room, with galleries (which had to be preserved), round three sides, and a shallow rectangular recess for the altar on the fourth. There was nothing to suggest style or treatment, except the round-headed windows, which I ventured to think entirely out of character with the architecture of the portico.

My work was not done at hap-hazard, or without long and anxious thought and much consultation with those who had the best interests of the church at heart, and now, after the lapse of more than twenty years, I see nothing in the general scheme that my



ST. BARTHOLOMEW THE GREAT—NEW NORTH TRANSEPT.

maturer judgment condemns or that I could wish to see altered. If that avowal brings me "disgrace" I must try to bear it in public with that equanimity which the writer of the criticism no doubt feels in pronouncing judgment anonymously.

Faithfully yours,

ARTHUR W. BLOMFIELD.

[In a private letter to us Sir Arthur says that in matters of taste "disgrace" is rather too strong a word to use, and most undoubtedly it is. And it is also a very foolish word to use.—ED.]

SAWDUST.

WITH a view to consider the position as to the question of the northern approach to the Tower Bridge, the Whitechapel Board of Works is convening a conference of the neighbouring local authorities.

THE Nottingham Town Council have decided to purchase 19 acres of land as a recreation ground for the Meadows district, to replace the Queen's Walk Ground taken for the purposes of the new M. S. and L. Railway. The land forms part of the Clifton estate, and its cost is estimated at £18,000, with another £2,000 required for levelling and laying out.

THE Salford Corporation has decided to apply to the Local Government Board for sanction to borrow £7,000 to complete the purchase of the remaining properties under the housing of the working class scheme. There are borrowing powers to the extent of £63,373, of which £14,000 is still unexpended.

THE restoration of the parish church of St. Mary, Shrewsbury, the nave of which was partially destroyed during a gale on Feb. 10th, 1894, when the upper portion of the slender spire was blown down, is making good progress. The spire has been restored, and the contractors, Messrs. W. Bowdler & Co., of Shrewsbury, have rebuilt the walls of the clerestory with new windows, and have finished the reconstruction of the roof, which is an exact counterpart of the old one, and, indeed, made up in great part of the old timbers. The lead covering is completed, and in the inside the scaffolding has been removed. The workmen are now engaged clearing out the debris and rubbish that had accumulated. The church will be reopened at Easter, the only part of the interior remaining to be dealt with being the floor and the seating.

MR. W. DURRANT has been appointed surveyor to the Chertsey Rural District Council at a salary of £200 per annum.

THE Doncaster Corporation has accepted the tender of Messrs. Arnold & Sons, at £505, for the new telegraph offices at the race common.

MESSRS. W. S. HALE and J. C. MURRAY have been elected associates of the Royal Society of Painter-Etchers.

THE Halifax Town Council has under consideration the purchase of the old infirmary and Assembly Rooms, in Harrison Road, for new police offices and cells. The price for land and buildings as they stand, the whole comprising an area of 4,250 square yards, is £7,000. If the purchase is ratified by the Corporation, an outlay of from £15,000 to £20,000 will be entailed in the demolition of a large part of the present premises and their reconstruction to suit the requirements. The additional provision of a court and magistrates' and clerks' offices will also probably be made.

THE Bath Town Council have resolved that in future all plans and elevations of new buildings submitted to the Corporate Property Committee for their approval shall show in outline the elevations of the buildings on each side, the frontage line of the adjoining property, with all projections beyond that line, and the nature and description of the materials of which the building or buildings are proposed to be constructed.

THE Town Council of Harrogate has resolved that a portion of the Stray, known as Prospect Hill, should be laid out in accordance with the plans presented by the surveyor at a cost of £1,530, the large scheme, costing £3,500 not being approved.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

THE EDITOR does not hold himself responsible for the opinions of Correspondents, whose communications should be brief and plainly written on one side of the paper.

THE BUILDERS' JOURNAL goes to press on Monday at 6 p.m. All matter must reach the Editor by the first post on Friday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments. Subscribers in London or the Suburbs receive their copies by the first post delivery on the day of publication.

Advertising.

CHARGES FOR ADVERTISEMENTS.

SITUATIONS WANTED.

Per line (about 10 words), Sixpence.

Minimum charge, Eighteenpence.

Three Insertions for the price of Two.

SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS, TRADE AND GENERAL ADVERTISEMENTS.

Four lines (about 40 words), Three Shillings.

Each additional line, Sixpence.

Prepayment in the above Advertisements is absolutely necessary.

The charge for Paragraph Advertisements on the Front Page is Fifteen Shillings an inch, single-column. Minimum charge, Five Shillings. Paragraph Advertisements on ordinary page, single column, Seven Shillings and Sixpence per inch.

MANUFACTURERS' ANNOUNCEMENTS ON ORDINARY PAGES.

Per Page, Single Insertion, Eight Guineas.

Discounts for series on application to the Manager, who will make Special Contracts for Announcements on Back and Leader Pages and positions facing matter.

NOTICE.—Advertisements for current week's issue are received up to last post on Saturday. Alterations in standing Advertisements must be made before 6 p.m. on Fridays.

Advertisers in THE BUILDERS' JOURNAL may have their replies addressed to the Manager's Office, free of charge, and may have them forwarded if addressed envelopes sufficiently stamped are sent.

Reading Cases, lettered in gold, may be had from the Manager. Price, One Shilling.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

At a meeting of the Harwich School Board on Thursday, Mr. J. Start, F.S.I., architect, of Colchester, Clacton-on-Sea and Harwich, was instructed to prepare plans of schools for 450 children on the main road and for 350 children on the Bathside, both to be built on the ground floor, with covered playgrounds, lavatories, &c., in the basement. The sites for these schools have very bad bottoms, and will therefore necessitate piling and planking. The clerk was also instructed to advertise for tenders for the Lower Dovercourt schools according to plans prepared by the same architect.

The Builders' Journal.

MEN WHO BUILD.

No. 3.

MR. ASTON WEBB.



LONG years ago, in memory's fancy calendar, the exciting moments of your life when first your name, with half the alphabet after it, appeared upon a real brass plate on a real front door, are vivid yet. And what hopes and aspirations crowded the back room on the second floor, and how beautiful was the conception of the colleges you were going to study, just to get your hand in, for the works which were going to crowd upon you almost before you had time to pin your Whatman to your Stanley drawing board. Those things have passed, the aspirations and the conceptions—but standing in Mr. Aston Webb's fine room in Queen Anne's Gate, turning over the portfolios of drawings for Christ's Hospital Buildings at Horsham, it wanted an effort to realise that this was not some other man conceiving a fairy structure, beautiful in parts and grand in whole, which, like the structures of the kingdom of Hope, fade away the moment you come to love and to admire them. It was no such dream, but the beauty of a reality which comes to one man in a century, and, perhaps, when he least expects it.

Mr. Aston Webb is just entering that expansive period known as the prime of life, and, therefore, it is not difficult for him to remember the five years he spent as an aspiring pupil with Messrs. Banks & Barry, five years of almost incessant classic work, bringing its usual reversal of feeling the moment the five years' toil was ended. For twelve months Mr. Webb travelled through Europe, doing the usual places, making the usual sketches, saturating his brain with the usual studies. In 1873, on his return, he was the Pugin student; for the next nine years nothing disturbed the usual tenor of his way towards the Presidency of the Architectural Association—which always seems the first official stepping stone in the career of an eminent member of the profession—in 1882. The world, about this time, became thoroughly acquainted with the work of the coming man. His mind had already matured upon a method which had charm and subtlety and piquancy of effect without the laborious feeling which characterises the work of "picturesque" designers. His work was minute—it is minute to this day—in general handling, there is nothing broad and fierce about it, it is insinuating rather than striking, and the more one looks at a specimen of it the more this fact develops itself. Perhaps it was from his father—a not altogether unknown painter and engraver—that this faculty sprung. In 1889, Aston Webb became honorary secretary of the R.I.B.A., a post where much tact and busi-

ness delicacy is necessary, and he retained the position until 1892. Two years' later he became Vice-President. The first great fortune, however, that came to him was the day on which the designs he had prepared for the Admiralty and War Offices, in conjunction with that supremely clever draughtsman Mr. Ingress Bell, were selected as entitling the authors to enter the final competition. That in that final competition the work of these two men warranted the intense praise of many able critics is common knowledge, and that the execution of their matured designs would have added a noble monument to the public buildings of Europe is an acknowledged fact. The good fortune that came to Messrs. Webb and Bell over this work cemented their collaboration, and since then, most of the public work entered upon has been in conjunction with each other. The Victoria Courts, at Birmingham, gained in open competition was a very fine work, so fine, indeed, that when the new Police Offices were to be erected on an adjoining site, it was the architects of Birmingham who, in a body, petitioned the authorities to commission Messrs. Aston Webb and Ingress Bell to carry out the work. Upon this, other honours



came thick and fast. The Government, having been strained into action for the completion of South Kensington Museum, invited Mr. Webb and two other architects to prepare designs, and Mr. Waterhouse, the assessor, selected the work of Mr. Webb as the most satisfactory of the three. Over the fireplace in his room in Queen Anne's Gate, the perspective of this fine work rests peacefully behind its guardian glass, smilingly waiting the advent of a Chancellor of the Exchequer who has a heart above estimates and the imperious demands of a devastating army and navy. The work itself has quite an Eastern flavour about it, stimulated by the nature of the exhibits it will house, and is the most ambitious design Mr. Webb has personally conceived; and perhaps the finest praise you can offer to it—in its present paper condition—is that in execution it will rival very closely that magnificent pile, the Natural History Museum, which Mr. Waterhouse himself gave us on the other side of the road.

The Metropolitan Assurance Offices, in



PEVEREY.—ASTON WEBB, ARCHITECT.

Moorgate Street—the entrance of which is illustrated in the present issue—was carried out by Mr. Webb and Mr. Bell, as was also the United Service Institution, in Whitehall. But, above and beyond all else must be put the magnificent scheme which these two men offered successfully in competition for the new schools of Christ Hospital, at Horsham, a scheme you will have delight in fully describing when the drawings are amended from their competitive state. Of domestic work, Mr. Aston Webb has done much and done it beautifully. His largest house is Peverey, the delightful seat of Sir Offley Wakeman, a man of much artistic taste and refinement; and everybody knows of the restoration work at St. Bartholomew's Church, which is still leisurely proceeding; and of the new Church of the French Protestants, in Soho Square. St. George's, at Worcester, is now in course of erection; and Mr. Webb has large works maturing towards completion in Stafford, Liverpool, Burton, Monmouthshire and Sussex.

For at least 20 years, Aston Webb has devoted a great deal of his time to the two professional societies, and perhaps it is to his belief and hard work in the Architectural Association that much of his success is due. He has, more than any other man, got nearer to a matured nineteenth century style, and a

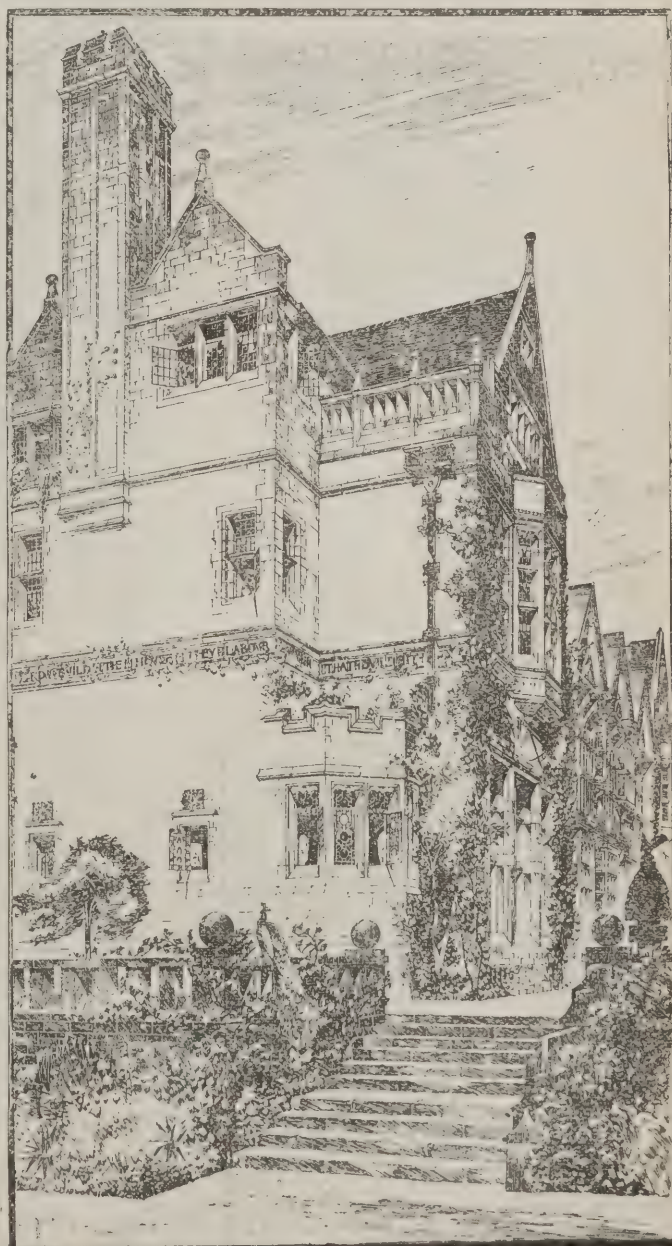
very charming style it is. Like most modern English work, it has the Renaissance as its starting point, impressed with the same influences which have created an Ernest George and a Norman Shaw, and although, as yet, Aston Webb has not quite arrived at the perfection of these two wonderful artists, he has undoubtedly surpassed them in the wider range of method which he is able to adopt. No more striking instance of this will be found than in the Horsham Schools, and the completion of the South Kensington Museum, which is entirely his own and quite a revelation. Some there are who consider Mr. Belcher's design for this latter scheme the most wonderful piece of architec

years much undoubtedly will happen in the camps of architecture; and it will surprise no one to hear that Aston Webb, one of these fine mornings, will find himself wending his way towards a certain spot in Piccadilly, where we are taught to believe—and where we do believe—rests all that is most beautiful and most refined in English Art.

FLUATE is the name applied to a liquid used for hardening and weatherproofing building stones and similar materials, chalky and not chalky. Crystals of fluate of magnesia are dissolved in water, and a brush is used to apply it. The cost for dressing Bath or Portland stone is stated by the Bath Stone Firms, Limited, Abbey Yard, Bath, to be 1d. for each square foot.

THE Wakefield City Council has decided to engage Mr. R. Hammond as electrical engineer, and to apply for powers to expend £20,000 in carrying out the first instalment of the proposed electric lighting works for the city.

THE Aberdeen Harbour Commissioners have resolved to provide additional shed accommodation on both sides of the docks, and a new steel swing-bridge, with double line of rails, to take the place of Regent Bridge, which at present crosses the east end of the upper dock. The work will be carried out by instalments. The estimated cost of the new sheds is upwards of £33,000, and that of the bridge £13,400.



PEVEREY.—ASTON WEBB, ARCHITECT.

tural skill of the last quarter of a century, but with that we have at this moment nothing to do.

Although Aston Webb lives in Ladbroke Square, in a house he has altered to his own liking, his practice takes him a deal into the country, and that to him is a delight. Above the medium height, slim of construction, and not particularly robust in appearance, Aston Webb possesses a fiendish love of work which he has the faculty of impressing upon those about him. No man takes greater pains than he does, no man insists more implacably upon his desires, no man possesses the power of conception more forcibly than he possesses it. In the next ten

A CHAT WITH THE PRESIDENT OF THE ARCHITECTURAL ASSOCIATION.

THERE is one very noticeable feature of the Presidency of the Architectural Association—it seems to confer upon its upholder a sweet and happy disposition, like unto that of the man who spends his day amid the green fields of an earthly paradise, and his night coquetting with the fairies of an architectural heaven. Just cast your memory back over the presidential list for five, or ten, or fifteen years, and you will call to mind as fine and jolly a set of earnest men as ever yolked themselves to a position which is one unending spell of good, sound, honest hardwork, from the moment they are elected until they assist their successor to mount the presidential dais in Conduit Street. You must not play pranks with any of the executive fellows of the A.A., there is a round dozen who can use their fists as well as their pencils, and they are all at fighting weight in case any luckless individual should fall foul of their good intentions. They keep a journal too, do these enterprising young men, and they have been known to say some very nasty truths before now in the columns of the A.A. Notes.

THE BUILDERS' JOURNAL—in the specimen number issued for commercial purposes in December last—contained a pertinent criticism on the inaugural address of the President of the Architectural Association. It was not considered that Mr. Mountford had done justice to his opportunity, and we said so plainly, frankly, and without fear. With men like E. W. Mountford—there is nothing of the insipient, long-locked, sallow cheeked pessimist about the President—a criticism is always safe, because they know the world, and can take a ficer with the same equanimity as they can give one. Nothing came of our criticism—except a half-hearted protest on one point from a very prominent Committeeman of the Association—until the other day when Mr. Mountford himself inquired why it was “not wise to invest the transactions of the Association with too much importance.” When this thunderbolt dropped upon the editorial table in Talbot House, there was a bit of a consternation. Visions of more Chancery Orders took our breath away, and before we regained it, we thought we heard the tramp of the twelve light-weights coming down the corridor. As at present we only muster nine men and a boy, and the Editor himself—owing to events which need not be mentioned—is suffering from a serious attack of nervous debility, we could have offered but a poor resistance to overwhelming numbers, and, so, whilst everybody barricaded themselves in their rooms, one of the number ventured out to discover the President of the Association himself, and to appease him, before he commenced to do any damage.

A happy man, with a genial smile, is Mr. E. W. Mountford, and for the second year he is filling the presidential chair of the Association. Whenever you come across a man who has served a second year in this position, put him down as a brick of the right sort, and fear not for your wisdom.

“Well, Mr. Mountford, you think the doings of your society merit the utmost consideration?”

“I do, most emphatically. They merit the utmost consideration and the utmost importance. Why, the Association has more influence for good or evil upon the architecture of the day than the Institute itself.” And here you thought the first personal attack was about to be made upon you, for the President looked so very serious. “The flower of the profession are members of the A.A. We are helped by eminent men who have never entered the Institute—more's the pity

—and nearly all the prominent members of the Institute have passed through our ranks.”

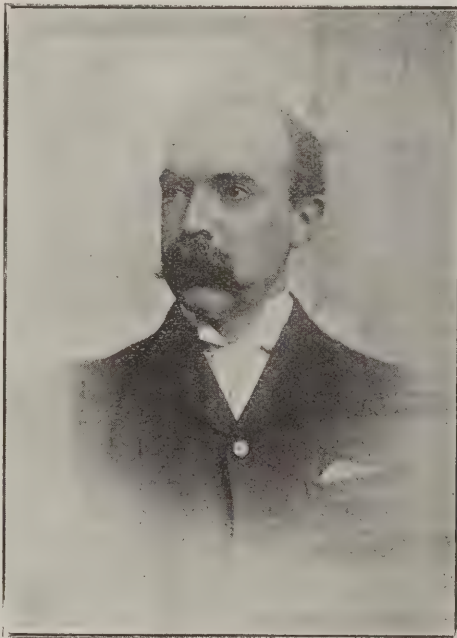
“Is there any objection,” I humbly asked with more visions of Chancery Orders, “is there any objection to my mentioning that fact?”

“None in the least; we make the architects, the Institute only examines them.”

“Then you are what we ourselves have termed you—The English School of Architecture?”

“Decidedly we are. Our regular course of tuition extends over four years, and if a youngster enters at the beginning and goes regularly through the whole period, he will have the best tuition in his art it is possible for a man to get in England. Of course, we are dreadfully hampered by want of funds and more spacious and convenient premises.”

Our chat then got a little looser—not, of course, in its moral tendency, but in its application to the A.A. Mr. Mountford expressed, delightedly, how the great rush into the profession had stopped, and he instanced it by remarking that at the beginning of the session there were only five Architectural students in the Royal Academy. And the stop could be traced in the working classes of the Association itself. But Mr. Mountford was emphatic in his denunciation



MR. E. W. MOUNTFORD.

of the so-called architectural classes which were held at Institutions like the Polytechnic in Regent Street. So long as they aimed at merely adding general knowledge and appreciation of the subjects treated there could be little harm, but when dozens of youngsters went through the curriculum, and launched themselves into the world as full blown and competent practitioners, then an incalculable amount of injury was caused. Of other men and other matters the discussion became general, and it was not the least pleasant when Mr. Mountford expressed the highest possible opinion of “THE BUILDER'S JOURNAL,” an opinion which he assured me was shared by all his professional friends.

So pleasant had been our chat that a whole hour had slipped by before we had half exhausted the stock of debatable subjects, although it was Saturday afternoon and the small army of draughtsmen had departed for the day; and deeming it wise to cut off all detail here and save it for a special descriptive sketch of the history of the Architectural Association and some of its Presidents, with which Mr. Mountford courteously promised to render what assistance he could, I left, for the moment, one of the most genial

men ever enrolled upon the presidency of the A.A.

At the top of Buckingham Street, in the Vegetarian Restaurant, much affected by architectural underlings of the Adelphi, I got through, from the public call-room, to our own telephone—our number, if you will remember, is 35422—and joyously imparted intelligence to the imprisoned staff that the dogs of war had been called off. “No Chancery Orders?” plaintively queried the editor, and when I assured him there were none I thought I heard a sigh of relief just before the keys clicked in the locks, the doors of the publishing office were again thrown open, and everybody resumed the even tenor of his way.

AN ANCIENT DECORATIVE INDUSTRY.

IN a Foreign Office Report which has just been issued some very interesting particulars are given of a very ancient Art industry, which is still carried on some 32 miles south-east of Pisa, viz., the alabaster industry. Vice-Consul Carmichael, of Ceylon, to whom we are indebted for the interesting report from which we extract the particulars condensed below, says that Volterra, where the alabaster is found, enjoys a very special distinction in the world among places which produce the commodity, which is of five main varieties, and is found in nodules, embedded in large masses of limestone. At the end of each cavern whence it is extracted two or three men are to be seen working with small T-shaped picks, by the none too brilliant light of oil lamps, which, by a singular clinging to ancient traditions, are still of Etruscan shapes. In one cavern the block of alabaster will be well seen projecting from its surrounding bed of limestone, the operators carefully feeling all round it in order to avoid damaging it, and in order to get it out whole, the specimen being the more valuable the larger it is. In another cavern the workmen are heartily beating down the imprisoning wall of limestone till the white nose shows of what proves to be a block, blasting being resorted to when the quantity of limestone is very heavy, the workers preferring to work carefully by means of their T-shaped picks. This industry dates back to classic times, but great changes have been effected in it in even modern days. In former times there were three distinct classes of workmen employed in fashioning the raw alabaster—the master-artist, who owned a work-shop and employed hands, selling his products direct to the shops; the journeyman, and the travellers, who took the cases of goods and sold them as they went in all countries of the world. Of these the first and the last are extinct. In these times three men, usually relatives, work together, one being a turner, another a modeller, and the third a decorator, who is responsible for the carving of such decorative embellishments as fruit and flowers. Their gains are very small, and travellers, owing to the lowness of the prices at which they are sold at Leghorn, frequently refuse to believe that they are fashioned by hand labour alone. One description of alabaster is made by a process of dyeing—still kept a trade secret—into a good imitation of coral, and for a long time this speciality had a good sale. The fault of the alabaster workers is that, although they have all the true artistic characteristics of the inborn decorative artist, they neglect the fine models which are to be found scattered throughout the churches of Italy, evidently thinking that a superior class of work would not sell. Hence the market is drenched with dancing girls, classic maidens, and such like stock subjects, whereas a change would be more than passing welcome.



ST. BARTHOLOMEW THE GREAT—NEW NORTH TRANSEPT.

JEAN FRANCOIS MILLET.

The Peasant Painter of Barbizon.

By ARTHUR O'NEILL.

Continued from page 30.

CIRCUMSTANCES were more favourable for Millet at the date on which I met him, though even then he was troubled with his own ailments, his constant headaches and waning powers of sight; with the dangerous illness of his devoted peasant wife; with the draft upon his exchequer made by his brothers, who appeared to think that because he could paint well he must necessarily be paid well. But the state of his affairs during the preceding twenty years, which includes the period of his best work, was simply agonising. Tennyson tells you that it is the eternal want of peace that vexes public men. This master of Landscape Art was sorely straightened in his means from the first day that he took up Art as a profession, to earn his living, as he remarked, "by the sweat of his brow." Alfred Sensier was to him what Dr. Johnson was to Oliver Goldsmith. He managed, but with difficulty, to get an occasional £40 for pictures which now sell, or would sell if they were in the market, for £4,000. It may be taken as a maxim, though I myself should be saddled with the responsibility of originating it, that the course of genius will not run in the same groove as the ways of a prudent housewife. From the earliest days of his abode in Barbizon, Millet, like Rousseau, had around him a group of creditors whom he had, by hook or by crook, to appease.

Let Sensier, his always loyal supporter, describe the situation—"A baker, the only one in the place, threatened with oaths to withdraw the daily bread. A grocer had become his bailiff. A tailor sent the sheriff's officer to sell the furniture of his (Millet's) studio, and he would not allow the artist a day's or even an hour's grace." There is some reference in our proverbial philosophy to the toad under the harrow. Millet's time, when he produced "The Angelus" and the first of the "Sheep Shearers" series, was that of dire extremity, and it would be hardly an exaggeration to say of sheer destitution. "Try, my dear Sensier," he writes in 1853, "to coin some money with my pictures; sell them at any price; but send me a hundred francs, fifty, or even thirty." No doubt Sensier, the loyal, met the urgent demand. All we know of it is his own comment. "Then," says the true friend, "I trotted all over Paris, offering dealers and amateurs the paintings of my friend. Some grinned and sent me off as a madman; others, more rarely, bought, but at laughable prices. I went to my comrades. I told them they could buy with confidence, and that I would take the picture back if, later, they came to the conclusion that they had made a bad bargain. In this way I made some sales, and, after a month or two, back would come the painting, with a 'Decidedly, I don't care for this artist; I like anything else better'—a new embarrassment for me. I honoured my promises, but only by superhuman efforts, loans, combinations, all the series of youthful difficulties. "Thus," says Sensier, "I acquired many pictures of Millet, in spite of myself, as it were, and by the mere force of circumstances. Later, some of these stubborn amateurs came to me for the same pictures, but I refused, saying: 'It is too late; your pictures are in my harem, and I will just let you see them, like Candaules and the Gyges. But the mould is not broken. Go to Millet; he will serve you.' That was a time of trials, struggles and humiliating picturesque inventions to get us out of difficulties. I see it all through a mist, which changes sometimes into splendid rainbows; for I was as convinced as of a mathematical fact that Millet was a great painter."

This somewhat of a hackneyed phrase, that of the "good man struggling with adversity," is it possible that the gods did not love Millet in proportion to the gifts with which they endowed him, or even in the ratio of the vexations which the powers of evil brought to perplex his stalwart brain and honest heart. Three years passed and Millet, in the depths of the forest, had heard the echoes of his fame in the Salon, and had read the glowing eulogy of his "Sower," as presented by that most shrewd of critics, Theophile Gautier.

But fame by itself does not fill the bread-basket and thus the artist writes to Sensier on New Year's Day in 1856:—

"Barbizon, January 1st, 1856.
"My Dear Sensier,—The hour of breaking-down has come, decidedly. I have just found a summons to pay within twenty-four hours to M. X., tailor, the sum of 607 fr. 60 c. (say about £24). He is a vampire, as he promised to take a note till March. On the other hand, G. refused bread and was disgustingly rude. It has come! A whole procession of creditors will file through the house; it will be very lively.

"I have just seen the bailiff, and told him in my ignorance that credit was a usual and well-known thing. Does not the law allow an arrangement? A tradesman can catch you in a trap by offering you a year's credit, and at the end of six months bring you a bill, and force you to pay! Yes, the law knows nothing of these things—you must pay! It explains to me my want of aptitude at business, for, as far as I can see, you must put aside all clear reasoning and all good sense to learn chicanery, which is nothing better than subtle cheating. Since the law has a right to collar me, pray tell me what they will do to me, for I cannot admit its right to violence except on refusal of payment. I thought it was the business of the law to court conciliation. Tell me, for I have a hard head, how far people can go who want to proceed to the uttermost, and whose conscience never troubles them, for you might revolt against what is legal and say—'That is wrong—odious.' I want you to tell me just what they can do.

"Rousseau, to whom I told the story of the bailiff, is furious."

* * * * *

Here is another fragment from his written regrets:—

"Ah! the end of the month—where shall I find the money for it? for the children must eat."

"My heart is all black."

"If you knew how dark the future, even the near future, looks! At least, let me work to the end."

"I have a series of headaches which interrupt my work very often."

* * * * *

Or again, in his letter to Rousseau:—

"How I bore you, my poor Rousseau! You are a good proof that those whose hearts are kind live the life of victims. Do not think that I am unmindful of all the trouble that I put you to, but I can't help bothering you. I seem to be under a sort of spell. Ah! I must stop. I cannot and I dare not say what I think on this subject."

"I am working like a slave to get my picture done ('The Gleaners'). I am sure I don't know what will come of all the pains that I give myself. Some days I think this wretched picture has no sense. At any rate, I must have a month of quiet work on it. If only it is not too disgraceful! Headaches, big and little, have besieged me this month to such an extent that I have had scarcely a quarter of an hour of my painting time. Physically and morally I am going down hill. You are right. Life is a sad thing, and few spots in it are places of refuge. We come to understand those who sighed for a place of refreshment, of light and of peace. One understands what Dante makes some of his persons say, speaking of the time that they passed on earth—'the time of my debt.' Well, let us hold out as long as we can."

Is it wonderful, or in any way astonishing, that this "bright particular star" in the constellation of French landscape artists played for a time with the thought of self-extinction? He abhorred the art; but the suggestion pressed truly on him again and again, and found a permanent expression in several sketches, one of which I saw in the portfolios of an American collector—a painter lying dead at the foot of his easel; a woman, seeing the dreadful sight, lifting her arm, and appearing to cry aloud to the world for succour, as grim and horrible a conception as anything to be found in the Wiertz Museum at Brussels. And yet again, anent his troubles. His embarrassments increased in volume and multitude. The distracted artist surmounted in his mind, and through his wonderful prescience, the difficul-

ties of his domestic troubles and commercial cares, and, defiant of these small worries, soared with his own sweet spirit and on his own fleet wings into the broad empyrean—the realm of bliss, where everything is as lovely as the eyes are which search for loveliness.

(To be concluded.)

EXCAVATIONS AT MEDIUM.

AMONG the many valuable explorations which have been conducted by Professor Petrie, one of the most interesting is undoubtedly the excavations which were carried on at and round about the Pyramid of Medium. This Pyramid is of rather a peculiar construction, and quite unlike any of the other pyramids of Egypt. The system employed in constructing these pyramids was very similar to that of the so-called mastabas. They are for the most part rectangular masses of bricks, and faced with mud and earth. The pyramid of Medium has suffered many changes. As early as the time of Rameses II., B.C. 1333, the outside casing had been taken off, and little by little it was denuded of its former facings. A small temple was found in the east side of the pyramid. It consists of a small passage, a chamber, and a courtyard. Two steles, or tablets, were discovered between which was an altar, having, however, neither sculpture nor inscription. In the tombs were some very remarkable mummies. Unlike the usual method of burial among the Egyptians, by placing the mummy on its back at full length, the mummies at Medium were found in all sorts of different positions. Most of those found were doubled up with their knees under their chins, after the manner of Mexican mummies. Only one out of thirteen mummies was found in the usual extended position. Most of the mummies had their arms in front, but more often they were discovered with their hands holding their legs, a position which again reminds us of the Mexican method. The most beautiful tomb discovered is the tomb of Ra-hetep, who calls himself a prince. This tomb has been very much mutilated, and a large quantity of the colouring has been washed off by persons taking wet impressions in a careless manner. Among the many interesting representations with which this ancient piece of architecture furnishes us is one which shows Ra-hetep and his wife Nefert watching some hunting which is going on in the desert beyond. Opposite to this we have another scene representing Ra-hetep watching his sons catching birds; below this we see fishermen coming to shore with their nets. The whole of Ra-hetep's tomb is, in fact, one huge picture gallery, too large to be described in a few words. Important additions to our knowledge of hieroglyphics have also been made by these excavations, for the inscriptions are so beautifully cut that we can actually see the kind and species of animal represented. Thus, for instance, the owl, which is so common in hieroglyphic inscriptions, is shown by its colouring not to be the common bird usually found on barn doors, but the white-faced owl only seen in zoological collections. Prof. Petrie is still in Egypt, and doubtless he will, on his return, bring fresh treasure from the land of the Pharaohs.

We regret to announce the death of Mr. Francis Vigers, founder of the well-known firm of surveyors, Messrs. F. Vigers & Co. The sad event occurred on Thursday at his residence at Hersham, Surrey. The deceased gentleman, who for many years acted for the London School Board on most of its arbitration cases, was of the advanced age of seventy-five, and had retired for some years from active interest in the business. On Tuesday the funeral took place at Hersham cemetery, in the presence of many members of the profession in which the deceased was so greatly respected.

WINCHESTER.

AMID the scented clover, on the summit of St. Giles' Hill, and gazing upward into the blue vault, lined and flawed with wisps of high cirrus cloud, we forgot that less than two hours' ago we were in the close atmosphere of the terminus at Waterloo. Below, in a fold of the swelling Hampshire Downs, lay Winchester, and to the south the huge shoulder of St. Catherine's Hill, still fretted and scored with the works of the fortified camp of Vespasian, who conquered the city from the Belgæ—whence its Roman name, Venta Belgarum—for Winchester was a city ere the Romans took it, and Caer Gwent, as the Armorican settlers called it, was wrested from these by the Belgæ, who, in their turn, succumbed to Roman arms. Ludor Rous Hudibrass founded it, says tradition, in 892 B.C., which date would corres-

As there is a river at Macedon and a river in Monmouth, so is there a river at Damascus and a river at Winchester; but the resemblance does not, as in the former instance, end only there. Perchance some who read these lines will testify to the fact that the Baroda, at Damascus, and the Itchen, at Winchester, both split up into numerous streams, permeate the numerous cities, and turn up in the most delightful way when least expected. Both streams are shallow and of crystalline limpidity, and in both are trout, head up stream, lazily waving their fins. Leaving Bridge Street, and following a foot-path called The Weirs, we come—between stream and cottage gardens, bursting with a wealth of old-fashioned posies—to a wonderful wall, belonging to Wolvesey Castle, once the palace of the Bishops of Winchester. What a wall! Cold flint contrasts with mellow red brick, and the top is

Leaving the portal, we turn to the left, and then to the right, by the two noble elms, across the rich water meadows towards St. Cross. On the right are the College "Meads," bright emerald under the glorious sun, and we recall the lines—

Ridet annus, prata rident
Nosque ride amus,

sung by generations of Wykehamists in their famous home-going song, "Dulce Domum." We did not essay the experiment; but to this day, they tell us, all who knock at the buttery wicket of St. Cross are regaled with a horn of ale and a slice of bread. The quietude of the quadrangle and the quaintness of the ambulatory carried us back from London and 1891 to Henry de Blois and 1132, the date of men "to be lodged, clothed, fed, and properly cared for," and of a hundred other poor men "to be received and fed daily at the hour of dinner." Just a peep at



WINCHESTER CATHEDRAL.

pond with the year 139 before the founding of Rome. Dismissing this to the regions of fables such as that which tells of Brutus, grandson of Pious Æneas, as the founder of a colony in Britain, we must still feel the imposing weight of antiquity when we look upon the place which was England's capital, when London was an obscure settlement in a marsh. But the real Winchester, dear to the hearts of Englishmen, is neither Caer Gwent nor Venta, but the city which is represented by the square Norman tower and the ridge of mighty nave which rise above bread masses of foliage and are scaled by the graceful tower and turrets of Wykeham's College to the south.

The shining reaches of the Itchen, the dark masses of verdure, tempt us down to Winton, and we descend, by winding paths, to Giles' Hill, and emerge in Bridge Street, where a peninsula covered with flowers juts into a mill-stream.

garnished with yellow stonecrop and grey and golden lichen. But this can only be seen at intervals, for the wall is tapestried with fruit trees—peach and apricot, and fig trees of a growth so luxuriant as to remind one once more of Damascus. We pass along the banks of Warden's Stream to the College, and, as we revel in the beautiful fourteenth century architecture and the old-world repose of the place, we fervently thank that officer of Cromwell's who, being an old Wykehamist, dissuaded the stern Puritan from destroying the College.

A glance at the courts and through Seventh Chamber Passage, at the new buildings and "Sicily," and we leave, giving one look back at the three niches—one containing the image of the Virgin, holding a book; another that of the Archangel Gabriel, with a scroll, on which are the words "ave gratia plena;" and a third, the figure of the founder, vested and mitred, in the attitude of invoking his patroness.

the Church, dear to students of architecture as an example of the transition from Norman to Early English, and we leave the quiet world of the "Brethren," who clad in their sable gowns, bearing on the left breast a silver cross, potent, seem, like the venerable roof beneath which they dwell, to be mellowed by age. By Beaufort's Tower, where, in a tabernacled niche, kneels the carved presentment of that Cardinal, who, by genius and inclination, was rather a soldier and a statesman than a priest, we pass under the groined vault of the gateway, with Sherburne's motto graven in the wall, "*Dilexi Sapientium*," and stand once more in the lush grass of the meadows, gazing eastward at St. Catherine's Hill, crowned with, perhaps, the noblest clump of firs in England. Again skirting the classic demesne of St. Mary College, Winton, we wonder if the Flamens of the Temples of Apollo and Concordia, once standing hereabouts, taught gentle arts

to rude British youth, and, if so, whether the antique rules were as stringent as those embodied in the well-known motto "*Disce aut Discede*," &c., which adorns the walls of the present house of learning, and has been freely translated "Work, walk, or be whopped."

Passing the barracks, the dark uniforms of riflemen remind us that Winchester, once a camp of Roman legionaries, is now the depôt of those *corps d'élite* of British infantry, the Rifle Brigade and the old "Sixtieth." Leaving the battlemented West Gate on the left, we go down High Street, by the Cross and the old-fashioned Pent House, resembling in quaint simplicity the Pinz Zas in the Vin del Borgo at Pisa, to the Abbey Gardens, free to all, daintily kept, and with one of the several streams of limpid Itchen flowing through them. Recalling dim memories of St. Grimbald and clearer ones of Alfreht, its founder, we have the site of the Newen Mynster. Most probably on this spot the Codex Wintonensis was drawn up, and England first divided into counties. We reach the great church, which is the city's chief glory, through the tortuous passage of the Slype, which debouches at the north-west angle of the nave, on one of the buttresses of which is carved a Latin rebus, meaning "That way for him who prays, and this way for him who journeys."

The avenue of limes leading to the western door of Winchester Cathedral rivals the famous walk in Trinity Gardens, Cambridge. They are now laden with a wealth of sweet-smelling yellow-green flowers, and the myriad translucent leaves which diaper the sky, form a fitting approach to Wykeham's glorious pile. By the way, who ever thinks of Winford, Wykeham's almost forgotten architect, when descending on the excellence of the noble fane? Bishop Edlington's great west window, Walklyn's Norman tower and massive transepts, and Bishop Fox's Lady chapel at the eastern end, with its delicate tracery terminating in the finial and the statue of Fox himself, with his emblem the pelican, combine with Wykeham's great nave to make a goodly temple. But it is in the associations, more than in the venerable stones, that Winchester impresses us.

The dim mist of antiquity shrouds the beginnings of Christianity at Winchester. Under Vortigern and Uther Pendragon, the Cathedral existed. Its worshippers suffered under the persecutions of Diocletian, and rejoiced at the advent of Constantine, in whose son, Constans, the Priory adjoining found a devoted monk. With Cedric, King of the West Saxons, the fane was giving up to the worship of Thor and Woden, but with Kynegils it was restored to the Cross. Venta had become Wintonceaster, and the capital of Wessex, and was shortly to be, at the coronation of Egbert, the capital of all England. A host of memories crowd upon me in the lofty aisles. The severely simple tomb of Rufus—a plain *dos d'ane* of Purbeck marble—conjures up a picture of the charcoal-burner, Purkis (whose lineal descendants still follow the same occupation in the New Forest), bringing on his creaking wain the Red King's body, over yonder down, into Winchester. The quaint boxes containing the bones of the Saxon Kings recall the days of Edgar, who instituted the "Winchester Measure"; of Athelstan, in whose reign the city held six mints; and above all, of Alfred, pupil of that meteorological saint, St. Swithin, to whom, conjointly with SS. Peter and Birinus, the Cathedral is dedicated. The solemn coronation of the Confessor mingles with the vision of Canute renouncing his crown and placing it over the high altar, and the sweet form of Queen Emma walking unharmed over the heated plough-shares. The painted walls and ceiling of the Holy Sepulchre Chapel, built during the episcopate of Godfrey de Lucy, present frescoes limned fifty years before Cinnabill and Grotto

adorned Florence. While we are examining them, there comes a patter of feet, and Collegers and Commoners pervade the place, their fresh young faces contrasting with the stern Norman architecture of the transept, as they flit through the arched galleries of the triforium. It is the hour of prayer for the students of that famous College of Winchester, which Henry VI. took for his model in framing the rules for his new establishments at Eton and Cambridge.

So we leave the great temple, with the clear voices of the Wykehamists echoing in the unison of plain song along the lofty aisles, and turning down the Slype with its quaint



METROPOLITAN ASSURANCE OFFICE.
MESSRS. ASTON WEBB AND BELL, ARCHITECTS.

Latin subscription, "This way for prayer, that way walking" wander in the Abbey Gardens, which have, of course, a limpid branch of the Itchen running through them. Then up the winding High Street to the towers of the West Gate, and as we make our way to the station we feel sorry to leave the old city, so rich in memories, so intertwined with the national history. Winchester people ought to be thoroughly English. As we whirl through the pleasant Hampshire country we have retrospective visions of the

tombs of Saxon kings, of the Codex Wintonensis and Alfred, of the "Long Meads," and the College with its famous motto, which, freely translated, is "Work, walk, or be whopped," and of the dark uniforms of the Rifle Brigade and the "Sixtieth," which took us back to warmer climes and the memory of dear comrades.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

To the Editor of "THE BUILDERS' JOURNAL,"

Hornsey Park Road, N.,

Feb. 22nd, 1895.

SIR,—No less an authority than the President of the Local Government Board recently gave it as his opinion that ventilating shafts would be necessary before long at the House of Commons, owing to the defects in the sewerage system adopted there. In making that remark he struck, unconsciously it may be, upon what, to our thinking, will, with modifications, be the only cure for the evils which attend the present and faulty main drainage of the metropolis. The remedy that we would suggest is that towers should be erected—they need not be unsightly, if possible on eminences,—which, while ventilating all sewers, should be so fitted as to cause all the noxious gases to pass through fire, thus emitting nothing noxious into the air, destroying all contagion germs, and treating sewer gas very much in the same way as dust and similar refuse are treated in the "destructors," where all is consumed by fire, the resultant being ejected into the atmosphere far above the housetops. This would prove a big and costly undertaking, but we venture to think some such device will have to be adopted ere the inhabitants of the metropolis will be able to congratulate themselves upon having a passable drainage or sewerage system, or upon freedom from ever-recurring epidemics of contagious disease. The present plan of ventilating drains is one full of danger, and this is constantly demonstrated by the large numbers of children who in working class neighbourhoods fall victims to diphtheria and typhoid, these diseases being contracted from the street gratings when the youngsters are at play or on their way to and from school, when, sometimes, through an insufficiency of food, they are very apt to "take" the germs. A walk in the late evening, when the sewers are not crown full, and also in the morning, when they are at rest and to a certain extent empty, will be demonstrated to any one with a nose, the effluvia which arises at those times from many of our street open gratings being particularly noisome, and many a victim's illness and death from typhoid fever can be traced to an inhalation of this sewer gas. In such a city as London, and in face of the enormous outlay incurred in the laying down of our huge main drainage system, such a condition of affairs is criminally dangerous, and calls for an early remedying by the authorities that be, either by some such destructive means as that above hinted at, or by some other, and possibly better. Expensive the remedy will be, but that should be no drawback in such a city as London.

Yours obediently,

W. NORMAN BROWN.

THE large stained-glass window, with illustrations from the life of St. Peter, which has been placed on the south side of Riddlesden Church, Keighley, is from the studio of Messrs. Powell Brothers, of 30, Park Square, Leeds.

ARCHITECTURAL IRONWORK: CONSTRUCTIVE AND DECORATIVE.

*A Series of Instructive Papers for the
Artist and Worker.*

CHAPTER I.

INTRODUCTORY AND HISTORICAL.

THE use of metal in architectural construction cannot lay claim to a very remote antiquity, at any rate in Europe or America. Some other metals—simple or compound—appear to have been employed by the ancients to a considerable extent as *decorative* building materials, but not to a small extent even in a *constructive* capacity. The very free employment of thin *laminæ* in Solomon's Temple is a case in point, and it appears tolerably certain that some of the ancient nations—and amongst others the early Greeks—covered the internal walls of many of their more sumptuous edifices with plates of bronze, ornamented with *relievi*, produced either by founding or some process analogous to *repoussé*. None of these slabs have, it is true, been found in their assumed position, as they were far too valuable to primitive folk for that, and were doubtless torn down when the edifices to which they were attached were demolished or desecrated; but deep cavities in antique stonework still extant show the holes made to receive the shanks by which the bronze slabs were attached to the walls.

For ancient constructive architectural ironwork we must go beyond the boundaries of Europe, and, curiously enough, to a most unlikely race, the one which at the present day would be wholly unable to deal with such a material as iron. Not far from the city of Delhi, in Hindustan, stands the famous Lhât of Delhi, or Pillar of Delhi, an iron column of over fifty feet in height, and about sixteen inches in diameter, surmounted by an ornamental capital, and bearing a Sanskrit inscription. There can be little, if any, doubt that this column is an architectural member, and a very fine one. It is supposed—as some portion of it is embedded in the earth—that the pillar may even be sixty feet in its total length. General Cunningham, in his report, describes this column as of cast iron, but Mr. James Fergusson, the eminent architectural authority, and some other competent observers, declare that it is of wrought iron—an opinion to which I personally lean. This diversity of opinion, and the extraordinary fact that so large an architectural member should have been produced amongst Orientals, unprovided with machinery, more than two thousand years ago, invest the Lhât of Delhi with great technical interest, and has made it the subject of much discussion amongst experts. Mr. Mallet, the highest English authority on the metallurgy of iron, observes anent this column:—"We are obliged to consider that this pillar is *not a casting*, but is a huge forging in native Indian or some other Asiatic-made wrought iron, and if so, the question arises, how was it forged? We have no evidence that 'blooms' of more than 90 lbs. or 100 lbs. each were ever made by Indian methods; these would be too small to build up singly into a bar of sixteen inches diameter. It is, however, conceivable that such little 'billets' as were procurable from such blooms might be welded into bars, and these bars made into a faggot, out of which such a bar, by *sufficient means* for bringing it to a welding heat, and for then hammering it, might be welded into a cylindrical bar, such as this Indian pillar. Now, the limits to the size of a faggot that can be welded with given means of *heating it*, is found to be, where the mass is so great, in proportion to the power of the furnace, that the exterior of the mass, where the heat

is being applied, oxidises and melts away owing to the slowness of heating, and hence long continuance of exposure to the heat as fast as piece after piece is laid on to make up for the waste. This limit has been reached before now even in our best reverberating forge furnaces; it actually was touched upon at Liverpool in forging the Mersey Company's great 13-inch gun. Unless, therefore, the ironworkers of India between the third and fourth century *Anno Domini*^{*} possessed air furnaces and lofty stallas, or blowing apparatus of some sort, on a scale now unknown, and indeed not conceivable in any form of native apparatus, we may confidently affirm that no faggot to form a welded bar of sixteen inches diameter could have been by any possibility brought to the welding heat at all, or without such waste as to prevent its ever being forged. If we pass from the heating of such a bar to the forging of it our difficulties are still greater. The limit in the size of *hand forged* work in Europe was about reached in days gone by in the heaviest 'best bower' anchor of a ship of the line. The largest section of the anchor-shaft when welded to the arms was about eight inches, or perhaps nine inches across, and the welding was effected by the blows of twenty-four 'strikers,' trained to strike in time, and swinging 14 lb. to 18 lb. sledges. The shower of blows dealt for some minutes' spell upon the mass of iron of this large section produced a very insignificant effect, so that both the faggoting and the welding were often very defective, and the 'strikers,' who had to stand close in a ring within the short distance for swinging the sledge from the glowing iron, were greatly scorched by its radiated heat, and some, with fine skins, were unfitted for the work." In this connection I may note that Mr. James Fergusson has found ancient Hindoo beams of wrought iron of 21 feet in length and 8 inches section, which had evidently been made for architectural members, which demonstrates that the ancient Orientals were in this, as in many other matters, far in advance of the barbarian Franks.

With this digression I come more to the immediate matter in hand, when I find that the earliest use of iron in English architecture was about the commencement of the present century, when builders began to appreciate the use of the metal for such purposes as columns, storey posts, beams, girders and roof-trusses. The initiation and rapid development of the railway system in England still later tended to render the use of iron general, as it was found well adapted for the architecture of terminal and large stations, and what I may term an accident caused it to become yet more popular, when Sir Joseph Paxton, when gardener at Chatsworth to the Duke of Devonshire, designed and constructed some large conservatories, employing no other materials than iron and glass. The half century had nearly expired when the late Prince Consort conceived the idea of a Great Exhibition of the Arts and Industries of all Nations, to be held in London in 1851. The idea at once "caught on," and plans for an immense building were solicited. Paxton called to mind his conservatories, enlarged upon the idea, and sent in a design for a gigantic structure composed of iron and glass only. The novel idea was accepted, and soon the fairy structure rose "like an exhalation" on the southern side of Hyde Park, and at the close of the Exhibition it was removed to Sydenham, where, as the Crystal Palace, it still remains.

This then may be looked upon as almost the first practical employment of iron in building, a use which is becoming more and more adopted every day until it would almost appear to have attained the acme of utility.

^{*} The date is far too recent. The Lhât is doubtless many centuries more ancient.

Having touched thus briefly upon the history of ironwork in buildings, I purpose in the succeeding chapters treating of the various portions of architectural ironwork, in a manner which I hope will be useful to my readers, especially the younger workmen among them who may be setting out on the path of industrial life. In my next chapter I shall treat of "Columns."

(To be continued.)

THE LABOURING MEN.

Who are the labouring men?

We are the labouring men:

We who stand in the ranks of trade,
And count the tallies that toil has made;
Who guard the coffers of wealth untold,
And ford the streams of glistening gold,
Who send the train in its breathless trips,
And rear the buildings and sail the ships;
And though our coats be a trifle fine,
And though our diamonds flash and shine,

Yet we are the labouring men—

The genuine labouring men!

We bolt the gates of the angry seas,
We keep the nation's granary keys;
The routes of trade we have built and planned
Are veins of life to a hungry land.
And power have we in our peaceful strife;
For a nation's trade is a nation's life;
And take the sails of our commerce in,
Where were your "artisans' pails of tin"?
Ay, where were your "labourers' then"?
For we are the labouring men!

WILL CARLETON.

"WHERE THE RUDE FOREFATHERS OF THE HAMLET SLEEP."

SHAKESPEARE, as every one knows, was buried in the chancel of the church at Stratford, where there is a monument to his memory.

Chapman and Shirley are buried in St. Giles'-in-the-Fields.

Marlowe, in the church of St. Paul's, Deptford.

Fletcher and Massinger, in the churchyard of St. Saviour's, Southwark.

Dr. Donne, in Old St. Paul's.

Milton, in the churchyard of St. Giles',

Cripplegate.

Butler, in the churchyard of St. Paul's,

Covent Garden.

Garth, in the church at Harrow.

Pope, in the church at Twickenham.

Swift, in St. Patrick's, Dublin.

Savage, in the churchyard of St. Peter's,

Bristol.

Parnell (the poet, not the politician), at Chester, where he died, on his way to Dublin.

Dr. Young, at Welwyn, in Hertfordshire, of which place he was the rector.

Thomson, in the churchyard at Richmond, in Surrey.

Collins, in St. Andrew's Church, at Chichester.

Grey, in the churchyard of Stoke Pogis, where he received his "Elegy."

Goldsmith, in the chancel of the Temple church.

Falconer, at sea, with "all ocean for his grave."

Churchill, in the churchyard of St. Martin's, Dover.

Cowper, in the churchyard at Dereham.

Chatterton, in a churchyard belonging to St. Andrew's, Holborn.

Burns, in St. Michael's churchyard, Dumfries.

Byron, in the church at Hucknall, near Newstead.

Crabbe, at Trpwbridge.

Coleridge, in the church at Highgate.

Sir Walter Scott, in Dryburgh Abbey.

Southey, in Crosswaite Church, near Keswick.

Thomas Campbell, in Poets' Corner, Westminster Abbey.

Browning, in Poets' Corner.

Tennyson, in Poets' Corner.

TO ARCHITECTURAL STUDENTS.

THE Editor of THE BUILDERS' JOURNAL is authorised to make a very interesting announcement to Architectural Students who are willing to turn a few of their hours of study into profitable use. We are instituting a

SERIES OF OPEN COMPETITIONS

expressly for their benefit, and these Competitions will be carried out in every respect as the more serious and important ones of ordinary practice. We shall advertise each month for competitive designs, from students who are under twenty-five years of age. Applications must be made by letter in the ordinary way, and these applications must contain the writer's assurance that he is a *bonâ fide* student and under the prescribed age. He will then receive by post the details and all particulars of the Competition. The drawings must be addressed to the Editor, under conditions which will be stated, and he will adjudicate upon them, selecting six of the best sets sent in, submitting them to an independent assessor in the person of some well-known practising architect, who will make his award and which, of course, will be final. Certificates, signed by the assessor, will be presented to the authors of the three premiated designs and a cheque for half-a-guinea forwarded to them to defray their out of pocket expenses. At the end of the session the thirty-six premiated designs will again be submitted to a body of experts—preferably a committee formed from the twelve monthly assessors—and upon their report a valuable

Gold Medal and a Cheque for £10 10s.

will be presented to the fortunate student who has, in their opinion, done the best aggregate work. A public exhibition of these thirty-six designs will be held. The result of the monthly awards will be announced in our columns and the assessors' reports will be published in full. The drawings will remain the property of their authors, but we shall reserve the right to publish any we think fit.

Here is our first advertisement.

TO ARCHITECTURAL STUDENTS.

The Proprietors of THE BUILDERS' JOURNAL invite Competitive Designs from Students, under the age of twenty-five years, for a

Sea-side Bungalow,

on a sloping site overlooking the sea. The scheme will consist of the Bungalow on one or two floors, and a small Entrance Lodge with Stabling for two horses. The cost of the work must not exceed the sum of £2,000.

Designs to be delivered under cover and addressed to the Editor of THE BUILDERS' JOURNAL, not later than Monday, the 25th day of March next.

Intending competitors can obtain full particulars of the instructions and

conditions, post free, by applying by letter to the Editor of THE BUILDERS' JOURNAL, giving the assurance required, and marking their envelopes "Competitions."

Talbot House,
Arundel St., Strand.
Feb. 26th, 1895.

SAWDUST.

The fine old tower of St. Mary's Church, Brecon, will shortly be re-opened after having undergone a very careful restoration under the superintendence of Mr. F. R. Kempson, F.R.I.B.A., of Birchyfield, Herefordshire, and of 16, High Street, Cardiff. Great care has been taken to preserve the old work, and where it was found absolutely necessary to insert new work, every precaution was taken to ensure that it corresponded to the old work. The bells have been taken down, repaired, and rehung, including new bell framing by Messrs. Taylor & Son, of Loughborough. Messrs. Collings & Godfrey, of Tewkesbury were the contractors, who have carried out the work in a most satisfactory manner.

MR. ERNEST H. ESSEX, C.E., of Nottingham, has been unanimously selected for the office of chief assistant engineer and surveyor to the Urban District Council of Kettering. There were 97 applicants for the post.

PAPER is being used for insulating purposes for three main telephone wires that are being laid in Nottingham.

It has been decided by the London School Board that in future all contracts for building work shall contain a clause requiring payment of wages, to all workmen employed, at the scale fixed by the Federation and Association Agreement.

CARDIFF is a funny town, with funny people. Some there are who oppose the move of the Taff Vale Company's works to a better site; others object to an honorarium being given to the town clerk and borough engineer for special and very important work. Verily, such towns deserve to be served by trades union officials, rather than by some of the very best men in the kingdom. Then, they don't support their electric light works, though it is to their interest to do it; but they are agreed "that a new town hall and municipal buildings be erected on the present site and the sites to be acquired; and that the borough engineer be requested to prepare and submit to the Town Hall Committee instructions and conditions upon which competitive designs may be sent in by architects for the erection of a new town hall and municipal buildings upon the present site and sites to be acquired."

THE Consultative Council of the Building Trades Exhibition, to be held again this year at the Agricultural Hall, has decided that the handicraft competitions of 1894 shall be renewed and much extended. Work is to be submitted to various trial stresses to prove its quality, and to these trials the public will be admitted. Lectures on the Adulteration of Cements, Past and Present Architecture, Electricity in Building, Sanitation, &c., are to be arranged for during the time the show is open.

MR. W. WYBROW ROBERTSON, of Edinburgh, has prepared plans for the erection of a new general post office at Dundee. The designs are at present in the hands of the quantity surveyor.

A NEW fire brigade station is shortly to be erected at Maida hill, Paddington.

THE Church of All Saints, Hertford, erected in the place of the one destroyed by fire, was recently dedicated by the Bishop of St. Albans. The building has been completed from designs by Messrs. Paley, Austin & Paley, of Lancaster. The total cost has exceeded £15,000.

THE governors of the Bedford Infirmary have decided to erect an entirely new building.

Owing to the pressure on our space, "Trade and Commerce" is held over till next week.

THE surveyor to the Town Council of Guildford has presented plans for the new cattle market, and stated that the contract would be divided into two sections—one for builder's work and one for ironwork.

The School Board of Heckmondwike has adopted plans of a new school proposed to be erected in High Street, at a cost of £12,000.

AT Burnley, the Board of Guardians has decided to apply to the Local Government Board for sanction to expend a sum not exceeding £10,000 for the purpose of completing the erection of an infirmary adjacent to the workhouse of the union, in accordance with plans to which the Local Government Board has affixed its seal.

THE Vicar and Churchwardens of Wakefield have received an offer of £1,000 from Colonel W. W. Clapham, of Manchester, for the erection of a new reredos in Wakefield Cathedral. The work will be executed under the direction of Mr. J. Oldrid Scott, whose father was chiefly responsible for the restoration of the cathedral.

DACRE LODGE, at Cockfosters, between Barnet and Enfield, was on Friday, 8th inst., destroyed by fire. It dates back to Charles II's reign, and was probably a lodge of the forest which formerly surrounded it. The present occupier is Mrs. Gladstone, widow of Mr. Robert Gladstone, of Manchester, cousin of the late Premier. The fire broke out soon after midnight at the top of the house, and, owing to lath and plaster partitions, spread the more rapidly. The plate, drawing-room and dining-room furniture, and a library were rescued from the fire, but much was destroyed. The left wing, which is of later date, though damaged by smoke and water, was saved. It is estimated that damage to the amount of about £10,000 was done. On an upper wall there was a fresco outline depicting a hunting scene of the time of James I.

It is stated that the scheme for the new theatre in Richmond is progressing. Mr. Etherington has evinced great energy in the floating of this scheme.

THE Hartley Institution of Southampton, has met to consider the question of raising the necessary funds for carrying out a scheme for the proposed alterations and additions to the Royal South Hants Infirmary.

New educational buildings are to be erected at Kingston-on-Thames. The architect is Mr. Chambers, of Brighton. His estimate for the Corporation building is £4,500, and for the County Council portion £3,270, the ultimate extension of the Corporation premises being estimated to cost £1,300.

New Board Schools are being erected at Stratford, and special consideration has been given to the ventilation, which will be carried out on the Boyle system, the latest improved form of the patent self-acting air-pump ventilator being adopted for the extraction of the vitiated air.

IN reply to a communication from the Clerk-enwell Vestry, the London County Council has resolved to contribute £350 towards the widening of Farringdon Road.

THE North Berwick drainage scheme is to be carried out according to the plans of Messrs. Belpage & Carfrae, engineers, Edinburgh. The cost is estimated at £1,300.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BALHAM, S.W.—For the provision and erection of three temporary iron buildings in Dragnire lane, Balham, for the London School Board:—

Lysaght, J., Ltd.	...	...	...	£1,676	0	0
Dixon, I., & Co.	...	...	...	1,657	10	0
Cruwys, T.	...	...	...	1,500	0	0
Charteris, D.	...	...	...	1,475	0	0
Croggon and Co., Ltd.	...	...	...	1,465	0	0
Harbrow, W.	...	...	...	1,395	0	0
Humphreys, Ltd.	...	...	...	1,350	0	0
Keay, E. C. and J., Ltd., Birmingham	...	...	...	1,279	15	0
Morton, F., and Co., Ltd.	...	...	...	1,224	0	0

* Accepted.

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BLACKBURN.—For the erection of eight houses, Whalley Old road, for the Daisyfield Co-operative Society, Limited. Mr. John B. Thornley, architect, 45, Market street, Darwen.

Walsley, J. ...	£2,541	0	0
Whittaker, J., and Sons ...	2,479	0	0
Smith, Harry ...	2,381	0	0
Highton, J., and Sons ...	2,334	0	0
Greysen, W. and A. ...	2,322	0	0
Parker, J. ...	2,320	0	0
Lloyd & Millward, Darwen*	2,104	0	0
Shuttleworth ...	2,025	0	0

* Accepted.

CAMBERWELL, S.E.—For adding a laundry centre and other works at Southampton street, Camberwell, for the London School Board:—

			For brickwork in cement, add
Holloway Bros. ...	£1,614	0	0
Downs, W. ...	1,599	0	0
Holliday and Greenwood ...	1,533	0	0
Marland, J. ...	1,467	0	0
Triggs, E. ...	1,440	0	0
Garrett, J., and Son, Old Town, Clapham*	1,330	0	0

* Accepted.

[(a) Cost of w.c.'s and drainage, £382; (b) tar pavement and playgrounds, £168; (c) boundary walls, £160; (d) laundry-centre, £526; (e) works on site, £65; (f) extra depth of foundations, £29; (g) for brickwork to be built in cement, £44. Total, £1,374.]

CARDIFF.—For the conversion of a chapel into a hall, Guildford street, for the Cardiff Masonic Hall Company, Limited. Mr. George Thomas, architect, Queen's chambers, Cardiff. Quantities by architect:—

Griffiths, George ...	£2,229	0	0
Gibson, Jno. ...	2,048	0	0
Haines, Jno. ...	1,990	15	9
Robins ...	1,930	0	0
Lathey and Co. ...	1,887	0	0
Davies, H. ...	1,886	13	5
Rees and Thomas ...	1,883	13	4
Davies, D. ...	1,815	0	0
Williams and Hoare ...	1,800	0	0
Purnell, O. ...	1,747	0	0
Knox and Wells ...	1,735	0	0
Thomas, Joseph ...	1,730	0	0
Allen, James ...	1,729	0	0
Turner, E., and Sons ...	1,668	0	0
Evans, E. R., and Co. (accepted) ...	1,636	10	11

(All of Cardiff.)

CARDIFF.—Offices, stables, boundary walls, &c., County Brewery, J. P. Jones, Richards and Budgen, Charles C. Jones, Joint Architects, Cardiff:—

Davies, D. J., Cardiff ...	£6,400	0	0
Jenkins, D., Swansea ...	6,390	0	0
Stephens, Bastow and Co., Ltd., Bristol ...	6,300	0	0
Richards, E. F., and Co., Barry ...	6,022	0	0
Shepton, S., and Son, Cardiff ...	6,021	0	0
Hatherley and Carr, Bristol ...	5,987	0	0
Willocks, H., and Co., Wolverhampton ...	5,985	0	0
Rees and Thomas, Cardiff ...	5,970	0	0
Allen, James, Cardiff ...	5,907	8	0
Griffiths, George, Cardiff ...	5,850	0	0
Lissaman, William, Cardiff ...	5,840	0	0
Davies, Henry, Cardiff ...	5,793	17	0
Davies, David, Cardiff ...	5,715	0	0
Lock, F., S. Cardiff ...	5,700	0	0
Evans, E. R., and Bros., Cardiff ...	5,632	18	7
Robbins, Fred, J., Cardiff ...	5,500	0	0
Gibson, Hy., Cardiff ...	5,500	0	0
Knox and Wells, Cardiff ...	5,497	0	0
Thomas, Joseph, Cardiff ...	5,350	0	0
Lathey and Co., Cardiff ...	5,333	0	0
Turner, E., & Sons, Cardiff*	5,288	0	0
Architects' estimate ...	5,380	0	0

* Accepted.

CLONES (Ireland).—For the execution of water-supply works for the Town Commissioners. Mr. J. H. H. Swiney, C.E., Avenue chambers, Belfast. Quantities by engineer:—

Harney, P. ...	£4,400	0	0
Cunningham, Jno. ...	4,300	8	3
McNally, Jno. ...	4,138	16	0
Lawson, Geo. ...	3,900	0	0
Dickson, Thos. J. ...	3,764	10	3
Harvey, Jas. ...	3,688	0	0
Johnston, Geo. L. ...	3,498	17	7
Hickson and Peet ...	3,296	10	0
Walsh, R. ...	3,272	16	9
McLarnon, Jas. ...	3,248	10	7
Green, Michael ...	3,218	7	2
McMahon and Gray, Clones (accepted) ...	2,899	9	7 1/2

DARWEN.—For extensive additions to Stores, for the Darwen Industrial Co-operative Society. Mr. J. B. Thorley, Architect, Market street, Darwen. Quantities by Architect. (Accepted Tenders.)

Knowles, J., Darwen, masonry and bricklaying ...	£4,318	0	0
Shorrocks, R., Darwen, joinery and slating ...	3,149	0	0
Coulthurst, H. J. and A., Darwen, cast and wrought ironwork ...	452	0	0

GREAT YARMOUTH.—For the erection of the "Excursion Train" tavern, North Quay, for Messrs. E. Lacon and Co., Limited. Mr. James E. Teasdale, architect, 3, Queen street, Great Yarmouth:—

Carter and Wright ...	£1,304	0	0
Eastoe, R. ...	1,205	10	0
Hewes, T. ...	1,179	0	0
Bray, J. F. W. ...	1,168	0	0
Bond, A. E. ...	1,156	12	11
Cork, W. ...	1,151	0	0
Grimble, F. ...	1,135	0	0
Wall, H. ...	1,134	0	0
Moore and Wright ...	1,124	0	0
Harman, J. ...	1,111	12	0
Read and Curtis ...	1,110	0	0
Cockrill, J. W., and Son, Gorleston*	1,068	0	0

* Accepted.

ISLINGTON, N.—For the provision of a manual training centre at the Gifford street school, Islington, for the London School Board:—

			For Brickwork in cement, add
Willmott, J., and Son ...	£1,630	0	0
Grover, J., and Son ...	1,552	0	0
Gregar, W., and Son ...	1,549	0	0
McCormick and Sons ...	1,517	0	23
Staines and Son ...	1,461	0	21
Lawrance, E., and Sons ...	1,364	0	28
Harvey, J., Red Cross st.*	1,335	0	17

* Accepted.

[(a) Cost of Manual training centre, on arches, £1,172; (b) works on site, £132; (c) extra depth of foundations, £31; (d) for brickwork to be built in cement, £17; total, £1,352.]

LEYTON.—For erecting a boundary wall and wood fence, Lea Bridge road Schools, for the Leyton School Board:—

Catley ...	£230	0	0
Maddison ...	223	0	0
Kirk and Randall ...	216	0	0
Holland ...	203	0	0
Reed and Son ...	193	0	0
Gregar and Son ...	193	0	0
Hearle and Farrow ...	188	0	0
Scott, S. (accepted) ...	179	0	0

LEYTON.—For supplying furniture to the Goodall road Schools, for the Leyton School Board:—

Illingworth, Higham and Co. ...	£265	0	0
Bennett Furnishing Co. ...	254	0	0
Spencer and Co. ...	253	18	0
Educational Supply ...	249	17	0
Wake and Dean ...	231	0	0
Taylor and Co. (accepted) ...	330	0	0

LINCOLN.—For construction of filters at the Irrigation Farm, Canwick, for the Corporation. Mr. R. A. MacBrair, City surveyor, Silver street, Lincoln:—

Bradley, J., Lincoln ...	£3,431	19	10
Wright, W., and Sons, Lincoln ...	3,234	8	3
Lansdowne and Sons, Lincoln ...	3,135	8	0
Close, H. S. and W., Lincoln ...	3,000	0	0
Baines, C., Newark ...	3,000	0	0
Horton, S. and R., Lincoln (accepted) ...	2,979	2	0
Surveyor's estimate ...	3,108	12	9

LONDON.—For the construction of a footbridge and approaches thereto, at Parliament hill, for the London County Council:—

Palmer, G. ...	£4,298	8	1
Gibson, T. ...	3,428	13	6
Darlington Wagon Co. ...	2,865	9	0

LONDON.—For the construction of 12-inch pipe sewers in Rye road and Surrey road, The Newlands, Peckham Rye, for the Camberwell Vestry. Mr. O. S. Brown, surveyor.

			Rye road.
Ballard, R. ...	£235	14	0
Adams, T. ...	236	0	0
Cox, H. ...	228	9	0
Jackson, J. ...	221	9	6
Robertson and Grant ...	218	11	0
Mayo and Co. ...	210	17	0
Wheeler, W. H. ...	180	15	0
Killingback & Co. ...	185	18	0
Saunders, S. (accepted) ...	179	0	0
J. Cloag ...	179	19	0

			Surrey road.
Ballard, R. ...	307	2	0
Adams, T. ...	305	0	0
Cox, H. ...	293	10	4
Jackson, J. ...	284	0	4
Robertson and Grant ...	281	11	0
Mayo and Co. ...	271	1	0
Wheeler, W. H. ...	246	17	0
Killingback and Co. ...	236	16	4
Saunders, S. (accepted) ...	231	9	0
Gloag, J. ...	229	8	0

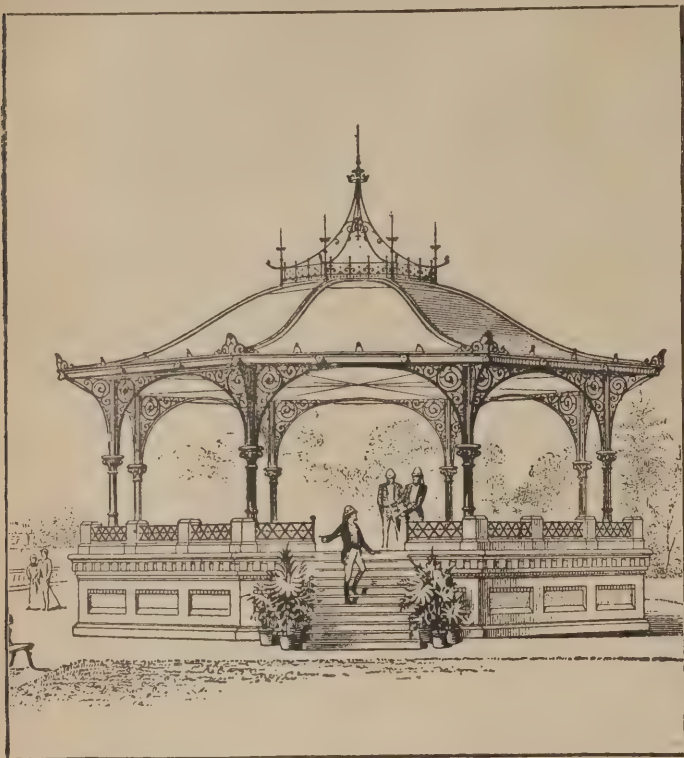
LONDON.—For executing painting and other works at 39 Lombard street, for the City Offices Company, Limited. Messrs. F. and H. Francis, Architects:—

Bywater ...	£495	0	0
Hanks, H. ...	483	0	0
Cubitt, W. ...	418	0	0
Colls and Sons (accepted) ...	398	0	0

LONDON.—Metropolitan Asylums Board. For the isolation block at the North Western Fever Hospital, according to plans and specifications prepared by Messrs. Pennington and Son, Architects:—

Collinson, J. F., Teddington ...	£60,611	0	0
Kellett, A., Willesden ...	60,481	0	0
Shillitoe and Son, Bury St. Edmunds ...	59,860	0	0
Miskin, C., St. Albans ...	57,633	0	0
Curling and Co., Ipswich ...	57,491	0	0
Leslie and Co., Kensington ...	57,295	0	0
Godson and Sons, Kilburn ...	57,225	0	0
Johnson & Co., Wandsworth common ...	55,520	0	0
Flint, W., High Wycombe ...	55,490	0	0
Allen and Sons, Kilburn ...	54,555	0	0
Lawrance and Sons, Wharf road, City road ...	54,385	0	0
Kirk and Randall, Woolwich ...	53,651	0	0
Howe, J., West Hartlepool ...	53,100	0	0
Treasure and Son, Harringay ...	53,058	0	0
Moody, H. M., Folkestone ...	53,000	0	0
Kirk, Knight and Co., Sleaford ...	52,800	0	0
Kilby and Gayford, Finsbury ...	52,736	0	0
Wall, H., and Co., Kentish Town ...	52,497	0	0
Wall, C., Chelsea (accepted) ...	51,400	0	0

The Architect's original estimate (July 2nd, 1894) was £43,500



MACFARLANE'S GLASS ENAMELLED DRAIN & SOIL PIPES
are impervious to rust, have perfectly smooth interiors, and can be supplied tested to any pressure.

HOT-WATER PIPES, BOILERS, COIL CASES AND FITTINGS.

STABLE FITTINGS—A SPECIALITY.

ELECTRIC LIGHT PILLARS, BRACKETS AND WIRE WAYS.

Illustrated Catalogues and Price Lists on Application.

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

**J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.**

NORTHWICH.—For erection of banking premises for the Manchester and County Bank. Mr. M. K. Ellerton, architect, 26, High street, Northwich:—

Stelfox and Carter	...	...	£4,050	0	0
Molyneux	...	...	4,040	0	0
Bostock, A.	...	...	3,975	0	0
Leicester, T.	...	...	3,925	0	0
Bostock, E. W.	...	...	3,875	0	0
Taylor and Son	...	...	3,801	0	0
Beckett, Northwich (accepted)	...	...	3,777	0	0
Ravenscroft	...	...	3,720	0	0
Ryland...	...	...	3,571	0	0
Appleton	...	...	3,550	0	0

PAIGNTON.—For construction of a storage reservoir, two filters and other works connected therewith, for the Paignton Local Board. Messrs. John Newton & Son, Engineers, 17, Cooper street, Manchester:—

Shaddock, J., Plymouth	...	...	£6,836	4	10
Dixon Bros., Swansea	...	...	6,752	12	5
Facey, R., Taunton	...	...	6,733	13	6
Weldon, H., Birmingham	...	...	6,018	4	3
Bridgman, M., Paignton	...	...	6,004	3	7
Thomas & Sons, Camborne	...	...	5,879	0	0
Morse, S., Bristol	...	...	5,868	0	0
Ambrose and Welch, Bath	...	...	5,791	18	5
Webber, H., Paignton	...	...	5,518	0	9
Tempest, E., Newchurch (accepted)	...	...	5,075	2	2
Rabbich, H. P., Paignton	...	...	4,840	0	0

PLUMSTEAD.—For the provision of a laundry-centre at the Vicarage road school, Plumstead, for the London School Board:—

Holliday and Green-wood	...	...	£1,496	0	0
Mid-Kent Building and Contracting Works, Ltd.	...	...	1,344	12	6
Craig, T. H.	...	...	1,315	16	0
White, T., and Son	...	...	1,304	17	11
Calnan, M., and Co.	...	...	1,310	0	0
Proctor, E.	...	...	1,260	8	0
Kirk and Randall	...	...	1,244	0	0
Akers, W., and Co.	...	...	1,225	10	0
Otway, J., Chislehurst	...	...	1,197	0	0

* Accepted.

[(a) Cost of tar pavement, playgrounds and drainage, £248; (b) boundary walls and gates, £175; (c) laundry-centre, including new w.c.'s, £702; (d) works on site, £19; (e) extra depth of foundations, £53; (f) for brickwork to be built in cement, £30. Total, £1,227.]

SOUTHEND-ON-SEA.—For building schools in the Leigh road, Southend-on-Sea, for the Southend-on-Sea School Board. Mr. W. T. Hobbiss, architect, Clarence road, Southend-on-Sea. Quantities by Mr. F. W. Harrison:—

Baker and Wiseman, Tyler's avenue	...	...	£8,250	0	0
Steward, J. W., Princes street	...	...	7,916	16	0
Darke and Son, Alexandra street	...	...	7,327	0	0
Woodhams, Southchurch road	...	...	6,788	0	0
Smith, F., 36, Park street	...	...	6,684	0	0
Architect's estimate	...	...	7,280	0	0

* Accepted provisionally.

SOUTH SHIELDS.—For Electric Lighting Works, &c., for the Town Council:—

Indiarubber and Guttapercha Co., Limited, Silvertown, cables and trenching	...	...	£4,846	0	0
Ferranti, S. Z. de, Limited, London, engines and alternators	...	...	3,003	0	0
Black, Hawthorn & Co., Limited, Gateshead, boilers and pipes	...	...	1,809	0	0
Watson, H., and Sons, Newcastle, pumps	...	...	905	14	3
Ferranti, S. Z. de, Limited, are lighting	...	...	793	11	0

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.
SLATE MERCHANT,
SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

**Penrhyn-Bangor,
Oakeley-Palmerston,**

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

**BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.**



A MEM.

The Building Trades' Exhibition.

March 25th to April 4th.

All the SPECIAL POSITIONS ARE LET.

The Consultative Council will make an Official Visit with the object of drawing up a Report of the Exhibits on Wednesday, March 27th, and following days.

TESTING OF BUILDING MATERIALS,

Under direction of Messrs. KIRKALDY & SON and Messrs. HENRY FAIJA & CO.

IMMEDIATE APPLICATION for SPACE should be made to—

The Manager,

BUILDING TRADES' EXHIBITION, 222, Strand, W.C.

COMPETITIONS.

**COUNTY BOROUGH OF WEST HAM.
COMPETITION.**

The Council of the County Borough of West Ham propose to ERECT a TECHNICAL INSTITUTE and PUBLIC LIBRARY in Romford Road, and they hereby invite Architects to submit DESIGNS for the same in competition.

Premiums of £250, £150 and £100 respectively will be paid to the Authors of the Designs which are placed by the Assessor first, second, and third in point of merit.

The Competitor to whom the first premium of £250 may be awarded will be employed as Architect, and will be remunerated in accordance with the schedule of professional practice and charges of architects, published by the Royal Institute of British Architects, such remuneration being independent of the premium.

The Council have appointed Mr. J. MACVICAR ANDERSON, F.R.I.B.A., 6, Stratton Street, Westminster, W., as their Assessor and Professional Adviser.

Designs are to be delivered at the Town Hall, West Ham, E., not later than FOUR p.m., on WEDNESDAY, 1st May, 1895.

Full particulars of the instructions and conditions can be obtained on application to the undersigned, on payment of a deposit of One Guinea, which will be returned in the event of the applicant either submitting a Design, or returning the instructions within one month from the date of receiving them.

By order of the Council,

Town Hall, West Ham, FRED. E. HILLEARY,
January 21st, 1895. Town Clerk.

IPSWICH.—MARCH 23.

DESIGNS are invited for the Building of a WORKHOUSE and INFIRMARY, with Specifications and Estimate. Premiums £100 and £50. My. A. F. VULLIAMY, Clerk to the Guardians.

TO SANITARY ENGINEERS.

100 GUINEAS PREMIUM.

PARISH OF HEMEL HEMPSTED.

The Rural District Council of Hemel Hempsted hereby offer a PREMIUM of 100 GUINEAS to Sanitary Engineers for a SCHEME for CARRYING OUT A SYSTEM for the SEWERAGE and SEWAGE DISPOSAL of this Town so as to meet the requirements of the entire area of the parish and town for which provision has to be made.

The scheme to be accompanied by plans, and an approximate estimate of the cost, to be delivered by the 1st JUNE next.

Full particulars of the conditions under which the premium will be awarded may be obtained on application to the undersigned.

WALTER GROVER, Clerk to the Council.
Hemel Hempsted, Feb. 13th, 1895.

The Builders' Journal.

Vol. I., No. 4.

Tues., March 5, 1895.

ILLUSTRATIONS.

The Staircase, Buchan Hill	49	Nazareth House, Bexhill.....	55
Chatsworth	50	Portrait of Mr. Ernest George	56
Ditto The Sculpture Gallery	51	Redroofs: Mr. Ernest George's House at Streatham ..	56
Portrait of Mr. John Wolfe Barry, C.B.....	53	Shiplake Court.....	58
Catholic Church, Folkestone	54	Buchan Hill Fireplace	58
Portrait of Mr. Leonard Stokes, F.R.I.B.A.	55	Motcombe.—Interior of Dining Room and Hall	59

CONTENTS.

Moderated Progressivism	49	Bricks and Mortar	52	Society Meetings.....	61
Something Easier	49	A Chat with Leonard Stokes	55	Jean Francois Millet	62
The Introduction of the Pulpit	50	Men who Build, No. 4.—Mr. Ernest George ..	56	Professional Dignity	62
The Palace of the Peak.....	50	The Architectural Association	58	Architectural Ironwork	63
The Early Use of Burnt Tiles	51	Points about Fever Hospitals at the R.I.B.A. ..	60	Correspondence	64
		The First Period of English Architecture ..	61	Trade and Commerce.....	64

The Builders' Journal.

Moderated Progressivism.

THE Progressives will be disappointed by the result of the London County Council Election. The Moderates have marvellously increased their numbers and parties bid fair to be very evenly balanced. In this may lie safety, for one side may well play watch-dog upon the other. In a smallness of majorities—it is the fashion just now to assert—lies wisdom, and, while not accepting the aphorism in its entirety, we are inclined to think that a fair show on both sides may result in a decent and consecutive policy, providing members refrain from the temptation to shy brickbats at each other. The prolonged stir in the air over this municipal matter has been a little amusing. Our politico-cum-partisan daily papers have revelled in it, and an excited contemporary has gone so far as to employ Burne Jones. The result was eminently satisfactory in the art and the pictorial senses, but, politically, Progressivism would seem to be rather out of the bill with the London public. We believe, emphatically, in the good government of London; architecturally, sanitarily, and in the thorough administration of the streets, parks and buildings, but we look with dismay upon such municipal business becoming politically capitalised and tintured with alien bitterness and imperial consequence. London should be able to administer herself, equally with the large provincial cities and towns: Glasgow, Liverpool, Birmingham and Manchester. But there should be less hubbub and less humbug, less cant and contrivance, and more honest, sincere, and ingenuous willingness to do the best for the millions who live in the metropolis, have their dwelling, take their enjoyment, and earn their bread. We have regarded with a somewhat indifferent interest the columns of controversy flooding our contemporaries' pages; the limitless advice, the paraded turtle, the belated beadle trotted out by Progressives as bogies to the play. There is broad laughter in the easy way in which the Progressives have forgotten their own to scoff at the Moderate bogies, bogies summed up in the wild fear of a Commune, and in the general hint that the streets should be barri-

caded else blood might flow. This spirit of exaggeration on both sides is very silly, very mischievous, and very likely in the end to defeat its own object. People cannot be aroused for ever by turgid hyperbole and rubbishy rhetoric. London is fairly complacent; she asks for such improvements as the gods may send her; she is willing to admit that reasonable and real progress is needed, and she is patient enough to wait the

merited scathing criticism without a doubt. What we should like to see is a unification of parties as well as the much vaunted unification of plans. Principles and plans may well follow a public spirited and an united policy, and if the London County Council would cease from internecine troubling, even the wicked—and certainly London!—would be at rest. The election has been a toil and a turmoil. Though it seemed to us voters

scarcely realized the importance of the day or the magnitude of issues, yet, to judge by the voting, London may be said to have done her duty fairly well. She has, at anyrate, chosen her Council for the next few years, and may all the Beatitudes inspire its labours. The L.C.C. can do with a little inspiration. There has been respiration and rhetoric enough.

Something Easier. WE are not prone to conundrums, and we never in our lives solved a missing word. There is a lazy lesion in our intellect that shuns the sad-faced problems set forth in the comic papers. It is so much more comfortable to let well alone. We are only reasonably anxious to do better. The puzzle papers never made their millions by this attitude, which we commend to our readers, it being uncopyrighted. But we have been startled by the question: When is a house not a house? This is a teaser. We could have answered the question: When is a house a blank bad house? or, When is a house the topsy-turvydom of home? or even so prosaic a matter as: When is a house fit to live in? This is about the run of the average interrogation that stirs our daily contemporaries to their depth in the gooseberry season. Architecturally, too, we might have our doubts—even going so far as to indulge in disputes upon style, or of the exact significance of a wall panel. But a house not a house? The Englishman's home not even his hovel! We face it. The question comes before the benign countenance of THE BUILDERS' JOURNAL. A Mr. Croall, a commercial traveller, took a house, Ash Grove, Leeds, for the summer. The Ash Grove is something more than a happy domestic air, but there were some infernal bad smells about that militated against harmony. When we state that Mr. Croall's wife and two children were shortly suffering from blood-



BUCHAN HILL.—THE STAIRCASE.
ERNEST GEORGE AND PETO, ARCHITECTS.

natural and legitimate development of her resources, without any philandering on the one hand or salamandering on the other. The ratepayers are right in keeping a chary eye upon the money, and yet at the same time we are sure that the stingy policy is, in the long run, the reverse of an economic policy. The past condition of London has

merited scathing criticism without a doubt. What we should like to see is a unification of parties as well as the much vaunted unification of plans. Principles and plans may well follow a public spirited and an united policy, and if the London County Council would cease from internecine troubling, even the wicked—and certainly London!—would be at rest. The election has been a toil and a turmoil. Though it seemed to us voters

poisoning, it will be inferred that the Ash Grove was not exactly a summer-house. Only one thing could happen and that was to open the door to the sanitary engineer; insanitary engineers had been there before. The result of much internal disturbance revealed the usual and shocking state of things. What odd drains there were outside the house had undergone a subsidence. In moderately plain unforcible English they had become blocked up. On expeditioning the dining-room floor—always a deadly and dangerous business—an old rubble drain was discovered, full of foul drainage, which oozed up through the soil and formed stagnant pools. Mr. Croall and family had seen enough. There is only one outlook in such circumstances—the sea. It is a big outlook, and it is not absolutely divorced from drains. But, down by the sea, foul drains get a little fresh air, so to speak. Mr. Croall, having removed his poisoned family, promptly refused to pay his rent. He was thinking, no doubt, of the delicious days (and general financial drain) by the sea. To reimburse him in this he set up a counter-claim, £50

drainage." In the upshot it follows that if you go modestly and mildly into a house without the legal "warranty" aforesaid, you have no redress, and your only remedy is your doctor. On the face of it, it would seem that a "house" certainly needs defining, and a "dwelling" some elucidation. For ourselves—after this County Court dictum—we prefer to be asked something easier.

THE INTRODUCTION OF THE PULPIT.

IN the early Christian times it was the custom for the Bishop to preach from his raised *cathedra*, but, on account of its great distance, as the place of the Bishop was at the background of the altar-niche, even Chrysostom and also Augustine made use of the ambon, which was nearer to the congregation; such ambons are still to be seen in many churches of Italy. Out of the ambon was developed, in the thirteenth century, the pulpit and the name *Kauzel* is retained in Germany as the reminiscence of the choir,

"THE PALACE OF THE PEAK."

CHATSWORTH, the home of the Cavendishes, is a "lordly pleasure house" enough, though scarcely one "wherein to dwell." The cold splendour of its halls chills you more than a little; its prerogative is that of a palace; it wears no familiar air and you feel its stately condescension. It receives you and speeds your departure with a cool, scrutinizing gaze; in every way an aristocrat in stone. It was curious to see the little sitting-room in so great a house, where the late Duke—fond as he was of architecture and of archæology—managed to make himself comfortable. Chatsworth was never his favourite residence; he buried himself in it and among his books for some season of the year. At other times the windows showed their blinds to the World. Yet Chatsworth is surrounded by the loveliest scenery in the English Midlands; you ramble by rapid waters or climb abrupt hills to find romance enthroned; you discover good timber, steep scarrs, dainty dales and dim ravines; old-world towns; pleasant inns to

be thankful of; even model villages—a more enigmatical advantage. It is amid such surroundings as these that Chatsworth shines in its white stone dazzling in strong sun-light; somewhat of a white elephant—in fact. I am told that the Duke of Devonshire absolutely loses by Chatsworth; it swallows no small revenue. But it is, indubitably, one of the show places of England, and in the completest sense a stately home.

The façade of the house faces the river, and the prettiest glimpse of Chatsworth is from the bridge shown in our illustration. Critics may differ as to the architectural excellence of this façade. But the open balustrade which surmounts the frieze is elegant enough and the Ionic fluted pillars and pilasters are valuable as relief, and



CHATSWORTH.

damages. Now we come to the stern, unbending and County Court moral. The Judge has decided that the rent must be paid. In more picturesque parlance, the Ash Grove was a habitable house. We are not surprised. Most people connected with building smile gently upon all habitable houses, and the nice point arises: what is the exact condition entitling a house to be regarded as "wholly unfit for human habitation." Foul smells do not, nor does shocking sanitation. Many a tumble-down tenement is healthier in all safe outward aspect than the flimsy contrivance of modern shoddydom. It would be interesting to have foul smells legally tested. Even a Judge might then scent other wisdom in the air. With regard to Mr. Croall's counter-claim, he has been awarded twelve guineas, a paltry sum that would not cover more than the doctor's bill. What is more important still, is that even this modest justice was only obtained and expressly staded to be given on the ground that the landlord had handed over to Mr. Croall, "a special warranty with regard to

balustrade, *cancelli*. During the predominance of the Romanesque style, the pulpit was formed as a structure of stone, which, as it seems, stood in connection with the screen, or else leant against a pier of the nave. A parapet sometimes ornamented in relief, terminates it; a stone step led down from it behind. The most beautiful pulpit in Germany is that in the church at Wechselburg. While in Italy the pulpits retained the form of isolated structures, resting on columns, and adorned with all imaginable pomp and splendour of material, and of the noblest artistic perfection, in Germany the pulpit was generally on a single column, or a bracket, placed against a pier of the nave, and received the form of a cup, and became the favourite spot for the sculptors to cover with tracery and pictures in relief. As a rule, the four Evangelists or the four Church-fathers were introduced on the parapet under canopies.

A MISSION Church and hall are about to be built in Paddock Street, Hanley, from plans by Messrs. R. Scrivener & Sons, of that town.

break up what would otherwise be rather a monotonous face. The base is rusticated. The frieze is a fine piece of work, containing the Cavendish Arms, sculptured by Samuel Watson. The northern wing is a more recent addition from designs by Sir Jeffrey Wyatville and differs from the rest of the mansion in being a compound of Corinthian, Doric and Ionic. Chatsworth is one of the best domestic specimens of its style—a style much in vogue at the end of the last and in the early years of the present century, when every mansion must have its portico and its pediment to be worthy its name, and Ionic and Doric were great words to conjure with. But the lack of variety in treatment, and the absence of all such play as the Gothic gives, makes the description of even the home of the Cavendishes a prosaic matter; one looks in vain for any surprise, any quaint fancy stuck in unexpected place, or a window daring from its fellows; a gargoyle, a grimace so to speak, in stone. The first view of Chatsworth is the final view also; you remember the block rather than its beauty,

and a sense of size rather than of suggestiveness is what you bring away.

Almost any day in the season a little group of folk may be seen gathering outside the remarkably fine gates of wrought iron that effectually bar further progress. By and by, at a comfortable hour, a janitor conducts you onward, and next, a trim maid, wearing very much the aspect of a reduced duchess, takes you round, forbidding undue questions by the very magnificence of her manner. You are not permitted to loiter, and so your impression of the interior is as blurred as your exterior view is single and solid. The corridor leading out of the Sub Hall is worth looking at for its tessellated pavement, and has some busts of moment. The floor of the Great Hall is laid in mosaic by Henry Watson, son of the carver Watson who worked the frieze. The decorations, illustrative of the career of Julius Cæsar, are by Verrio and Laguerre, and are highly interesting. Derbyshire quarries have been utilised in the Great Hall and the Grand Staircase with exquisite effect, and again in the State Apartments, the door-cases of which are of the variegated marble for which the county is known and noted. It is to the State Apartments that the majority of visitors hasten, eager of interest, and prodigal of approval.

The ceilings by Verrio and Sir James Thornhill, luxuriate in allegorical subjects; Paris gives Judgment, and Aurora is engaged in her usual pastime of chasing away Night. The floors are of mosaic work, oak being employed. Fancy woods line the room, covered with very fine Gobelin copies from the cartoons of Raphael. An interesting point, with regard to the remarkable wood carving in these rooms, has been long debated. Some ascribe it to Gibbons, but there is no proof, while documents attest to the work of Watson and his associates. The probabilities are that Gibbons lent counsel and advice to the work, even if he did not supply some of it. It is interesting to recall Horace Walpole's eulogium: "There is no instance of a man before Gibbons who gave to wood the loose and airy lightness of flowers, and chained together the various products of the elements with a free disorder natural to each species."

The carving, whoever it be by, is to my mind, one of the most beautiful features at Chatsworth. A very striking piece of work is the "Net of Game." Other objects you are shown in the State Rooms—objects of personal importance, no doubt, such as the state chairs and footstools used at the coronation of their Majesties George III. and William IV., and a fine portrait of the late Duke, by either Vausomer or Myteurs. In the State Bed-room is the bed upon which George II. died. There are also tokens and trophies of Louis XIV., the Czar Nicholas, and other august visitors, and busts of a host of Cavendishes.

The South Galleries claim you, and you discover sketches by Titian, Rubens, Salvator

Rosa, Raphael and Claude Loraine. There is more fine carving and statues by Cibber, father of the notorious Colley of that ilk. Then the altar piece in the Chapel should be seen. There are eminent old masters, for the seeking, enough and to spare in the Drawing Room—a shapely apartment—and the Dining Room has treasures of its own, including reputed portraits by Vandyke and a Godfrey Kneller. The profuse way in which marble has been used in Chatsworth is very apparent in the Dining Room. The doors are surmounted with pediments supported by Ionic columns of Siberian jasper and African marble. There is a deep plinth of polished marble round the room; the chimney-pieces are masses of sculpture, and jasper and spar side tables are fitted to the walls.

All this seems but a prelude to the Sculpture Gallery, one of the famous sights of Chatsworth, and of which we give an illustration. Here it is possible to admire Canova's celebrated "Mother of Napoleon," exquisitely finished, the hands being remarkably modelled, or a wounded Achilles, by Albicini; a mosaic from Herculaneum, or

magnificence can do has been done, and if we prefer, after all, the baronial severity of a Norman tower, or a mullioned Elizabethan, or the wood and plaster of Tudor days, it is because each of these seems to perpetuate a bygone English era, whereas the Classic in England has no vital story to tell.

THE EARLY USE OF BURNT TILES.

IN the North German Lowlands, that is, on the coasts of the North Sea and the Baltic, with the Lower Rhine, the Mark of Brandenburg, eastward far into Prussia, and southward into Silesia, the want of natural stone led early to the use of burnt tiles or brick. As, however, most of these countries only became subject to Christianity in the course of the twelfth century, they adopted those forms of architecture which then reigned in the rest of Germany, that is, the late Romanesque, principally with a mixture of the elements of the Transition epoch. In the Romanesque time the use of brick caused the decay of the column Basilicas. As a rule, the nature of the material suggesting it, the pier was adopted,



CHATSWORTH—THE SCULPTURE GALLERY.

Shadow's chaste and delightful "Spinning Girl." Those who love Sculpture—and are not these, indeed, men who *build*?—can learn lessons to last them well into their years at Chatsworth. Throughout the house Sculpture is in evidence; you cannot get away from it. Here busts by Chantry, there by Wickmann; and the general sense of marble and spar and jasper and stone and space that Chatsworth gives you may account for that chilly air and attitude to the stranger of which I have before spoken.

It is when you have descended to the gardens, this being in the summer time, that you seem to reap a happiness of colour. The place has Paxton's reputation to keep up as well as its own, and right well do the gardens still testify to his genius. The fountains, the orangery, the immense palm-house—fore-runner of the Crystal Palace—the cascades, make the hours linger agreeably until one is loath to leave, driving away in the long sunlight of a June evening with regret.

Chatsworth is happy in having little history, no telling story or tradition adds romance to its walls, but all that marbles and

which, however, was soon richly decorated with half columns and other members, and soon led—as early as the eightieth year of the twelfth century—to the vaulting over of the whole church. The abacus of the pier remained much the same as that of the stone one, generally, however, with the greatest possible simplification of the members and of their arrangements. The transformation of the capitals principally on the half columns was especially energetic. Here, also, the form of the cushion capital was relied on, but instead of the abacus being developed by segments of a ball from the round of the column shaft to the square capital in brick building. This transition is accomplished by sections of a cone, so that the sides of the capital are not formed of semi-circles, but either of triangles or of trapezes. The ornamentation of these buildings is very slight, for, as a rule, the chief forms are often of unadorned simplicity. Sometimes, however, lime or sandstone is used for these more imposing parts and then they are formed with those ornamentations peculiar to the Romanesque styles.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
5th March, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

FOLLOWING the example set by the Conservators of the Thames in erecting a new weir, lock, and bridge, at Richmond, the Clyde trustees are about to proceed in a similar direction in the stream over which they have direction. Although the development of the patent sluice weir may really be said to have commenced over a quarter of a century ago, since when Mr. Stoney, the inventor, has been engaged in Madras. The theory of the new weir may be briefly explained as consisting in the provision of moveable sluices designed in such a manner as to impound the upper waters of a river at certain levels, and furnished with mechanism that lifts the sluices out of the river as soon as the flood tide raises the lower water to the same level, thus leaving the entire waterway free for navigation. In a similar manner as the ebb tide subsides the same mechanism leaves the sluices when the fixed depth of impounded water is reached. A wooden float attached to the upper side of the sluices endues them with sufficient automatic buoyancy to permit the passage beneath them of flood water, such arrangement being altogether independent of the mechanism controlling the tidal waters. In appearance this new class of weir can readily be mistaken for a bridge only, though it is this on both sides only, where there are footpaths, the centre being left open to enable the sluices to be brought up when it is necessary to raise them, these turning upwards and lying horizontally when out of use, the appearance being materially improved by this ingenious contrivance. These weirs are now to be found in the Manchester Canal to control the waters of the Irwell and Weaver; on the Rhine, near Geneva; on the Nile, in Egypt; and on Loch Earn; and now one is to be built on the Clyde, which will have three spans of 80 feet each, with a headway above ordinary high water level of 18 feet under the centre of the arches, the total cost being estimated at £45,000, a saving of £20,000 as compared with that at Richmond, which cost £65,000. We venture to think that when completed this new weir will meet with much appreciation from the frequenters of and dwellers on Clutha's stream.

THERE are numerous ways of extracting stones from clay, but slinging is, perhaps, the cheapest. It consists in cutting the clay as it issues from the ejectment hole of the pug-mill into lumps of about two feet long and slicing them into pieces of about half-an-inch (not more than three-quarters of an inch) in thickness. The implement used is called a sling, and can be wielded by boys. During the slicing most of the stones fall out of the clay. The rest are plucked out by hand.

ATTENTION has been called to the condition of several of the frescoes in the House of Lords. It is stated that one or two are in a shocking state, indeed, almost past repair. The report of the expert, who has been asked to advise, should suggest some speedy remedy, else restoration will be impossible, for a man, however able, cannot restore what does not exist. The frescoes in the upper waiting-room are particularly bad, and many of the others are going. If the condition of these wall paintings in the House of Lords is to be taken as a criterion, it would seem as if frescoes were fated to disappoint us.

THE new Slade Professor of Fine Arts at Cambridge, Dr. Waldstein, is a native of New York, and his degrees come partly from Columbia College and partly from Heidelberg. Fifteen years ago he began to lecture on Classical Archæology at Cambridge, and he succeeded Mr. Sidney Colvin at the Fitzwilliam Museum. Later on he resigned the directorship to become the head of the American School of Classical Studies at Athens; but two years ago he returned to his earlier love at Cambridge, though still retaining his Athenian Professorship. Dr. Waldstein has written some highly interesting essays on the Art of Phidias.

CARDIFF Architects are very agitated just now, for they have got a "burning question." We are sorry the new museum and art gallery are so dangerously ablaze, but have hope that a little reason will act as an effectual sprinkler. Mr. Bruce Vaughan, the President of the Architects' Society, has been interviewed. "The question involved," said Mr. Vaughan, "is simply whether Mr. Seward has been retained by the Corporation as Architect for the new museum and art gallery in Park Place. Mr. Seward says he has; members of the museum building committee say he has not." Now this seems to us rather a remarkable situation, and one which will need some unravelling. For it appears that Mr. Seward, who is the immediate past president of the Society, was appointed, under resolution of the Council, Architect of the library extension, which included, at that time, the museum and art gallery. The site for the museum and art gallery has been changed, and ground has been obtained from the Bute Estate, on the definite understanding and with the provision that the designs should be thrown open to public competition. Obviously, if this provision is to hold good, Mr. Seward cannot be the Architect for the new edifice unless he wins in open fight. But, *per contra*, the Corporation has not rescinded its original resolution appointing Mr. Seward Architect of the whole scheme. It is further admitted that Mr. Seward has done work in connection with the new site for the museum, but "only in an honorary position." We are a little at a loss to understand the position of an Architect professionally employed on one portion of a scheme and working in an "honorary" capacity upon another section, while appointed Architect of the whole by corporate resolution. The Corporation of Cardiff would seem to have landed itself in a cleft stick. It should either rescind its original resolution or else settle with Mr. Seward. The contention that a Corporation has a right to change its Architect for another portion of a particular scheme is perfectly tenable, providing sufficient reasons be adduced. As matters stand, Mr. Seward seems to us to be protected by the Corporation's own original resolution.

THOSE who take a pleasure in pastels should look in at 148, New Bond Street, where Mr. Gifford Dyer is exhibiting some charming pictures of Venice. Mr. Dyer is an American, one whose work is well known in

Paris, and is winning its way quietly in this country. There are over forty pastels on view, and they give us flashes of Venice; the incomparable tints of dawn and sunset, and the wonderful mists that hang over the lagoons like silken veils—the delight and the Tantalus of a host of artists. Pastel work has a charm all its own; and Venice seems to lend herself to the new treatment with a grace becoming her beauty.

THE failing health of Lord Aberdare seriously interfered with his usefulness on the Aged Poor Commission, so that his death will not in any way abruptly affect the enquiry. But it is singular that he should have died the day before the report was submitted for signature. Undoubtedly, his lordship knew more about the Poor Law than any other statesman, and his close application to the work of the Commission was but another evidence of his sincerity and singleness of purpose. The Poor Law is a reluctant subject; one scarcely calculated to send a man happy to dinner, but men like the late Lord Aberdare are of the elder and more earnest school, who find their work in somewhat unwelcome and ungenial fields. We are not prone to believe that the millenium is to be found in Royal Commissions. A Commission is, often enough, a piece of complex machinery, bewildering the public and grinding its Commissioners to dust, but the Aged Poor Report should contain more than the average amount of valuable matter, inasmuch as Lord Aberdare threw all his sympathy into the enquiry, and was particularly painstaking in testing the sources of information brought before the Commission. He was a man of exceptional grace of manner, and in his day one of our least obtrusive, but most effectual, heads at the Home Office.

A NEW building material is coming into use in America. It is made of $\frac{1}{8}$ in. strips of wood, from $\frac{3}{4}$ in. to $1\frac{1}{4}$ in. wide, placed between two sheets of heavy strawboard, and united with common cement under a heavy pressure. It is called compo-board, and its strength, compared with its weight, is said to be marvellous. The ends of an 18 ft. board can be brought together without breaking or warping it. When papered, the finish is as fine as upon any plastered wall. It is said that its cost is not more than that of first-class plastering; that it forms an absolutely air-tight wall, stiffens a building, is quickly put on, produces no dampness, and forms a more solid, cleaner, warmer, and drier wall at no more expense than the customary way.

THERE was much of interest in Miss May Morris's paper on "Mediaeval Embroidery," read before the Applied Art Section of the Society of Arts, last week. The use of tapestry in mediæval days was co-equal with its ornament. Fresh air played round the baronial mansion boisterously, and many a Gobelin concealed a gap. The arras served the purpose of screens and cosy corners, and concealed more things than feudal flirtations. Miss Morris pointed out that ecclesiastical embroidery was undertaken by great ladies as no holiday pastime, but in as business-like a way as in the church schools or lay guilds themselves. The two opposing characteristics of the Gothic spirit were an eager boldness and a fanciful inventiveness and imagination. Miss Morris did well to dwell upon the sterling character of this industry in the thirteenth and fourteenth centuries. Our knowledge of history and of ornament has been helped by the mediæval embroideries that have been handed down to us, and their vivid subjects have befriended the mind's eye by piecing together the details of the past.

A LECTURE on the "Ideals of Painting" was given by Professor Baldwin Brown in the Art Gallery, Glasgow. The branch of art to which he principally limited his remarks was decorative mural painting, a branch he chose because it had already been little treated of and was a subject of great importance to an urban community. He pointed out that little had been done by painters of this country in the way of mural decoration, and, consequently, its methods were imperfectly known in Great Britain, but it was a department which ought to be encouraged in Glasgow, whose school had the good fortune to possess artists fitted to shine in that department. After indicating how the ideals of painting and the standard of excellence among early Italian artists differed from those of later painters of Spain, Flanders and Holland, and especially how vastly Rembrandt had widened the field of art, Professor Brown proceeded to dwell particularly on fresco work. He chose as his principal example the great decorative paintings of the roof and east wall of the Sistine Chapel, by Michel Angelo. After illustrating the manner in which that Titanic artist bent the architecture to his own purposes, Professor Brown showed in detail the various decorative subjects with which he filled the space at his disposal. The lecture was illustrated with a full series of lantern slides of the Sistine Chapel compositions, and in addition to these a number of the most famous pictures and of the fresco decorations of other public buildings were shown and commented on in a most graphic manner.

THE clock for which Big Ben strikes the hour is the largest in the World. Looking at the dial from the northern footway of Great George Street, or from the Embankment, it looks as if its diameter might be equal to the space that a man of medium size could cover with outstretched arms. This estimate hardly does the dial justice, for its diameter is 23 feet. From the ground the minutes on the dial look like ordinary minutes, and as if they were close together. As a matter of fact, they are a foot a-part. The numerals are two feet long. The minute hand, with the counter-balance—the heavy end that projects beyond the centre of the dial—is fifteen feet in length. The clock-room is an apartment about 15 ft. square. Fully a third of it is occupied by the works. The clock is wound up by hand; it is wound up twice a week. The winding is done by two men who are supposed not to have a weak spot in their frames. Each winding-up occupies four hours. Big Ben, in comparison with the other four bells, looks like the Giant Sire of four promising sons. Lying on the floor is his old clapper. It is an oblong piece of iron 2 ft. long, 12 in. in diameter, and weighs 750 lb. Had not an accident happened to Big Ben, his tones would be even louder than they are. Before he was placed in position, some of the workmen amused themselves by striking him with sledge hammers in order to make him speak. In response to one blow, he replied in a cracked voice. What happened to the unfortunate workman is not known. In order to repair Big Ben's voice, the crack was cut away until the tone of the bell was again true. Twenty men could stand under Big Ben in a rainstorm and escape a wetting, if the rain fell in an exact perpendicular and stayed where it fell. About a foot from the mouth on the exterior, is the following inscription: "This bell weighs 13 tons 10 cwt. 3 qrs. 15 lbs. It was cast by George Mears, of Whitechapel, for the clock of the House of Parliament, under the directions of Edmund Becket Denison, Q.C., in the twenty-first year of the reign of Queen Victoria, and in the year of our Lord, 1858."

LORD RAYLEIGH, whose experiments have created so much interest, tackled an old theory in his lecture at the Royal Institution on Saturday afternoon, and found it strictly scientific. Antiquity may now add Truth to its hoary crown, while Tradition's tale is undimmed. Speaking on "Waves and Vibrations," Lord Rayleigh reiterated the archaic advice relative to pouring oil on troubled waters. Not only was the practice one belonging to remote Time, but there were strict reasons for its use. The oil gave a stiffness to the waves and left patches of smoothness which resisted the water. Lord Rayleigh pointed out that the absolute truth of this was demonstrated by water in a trough agitated by an electric motor, for, after oil had been thrown on, the lines of resistance to the mimic waves could be clearly discerned. Of late years those engaged in navigation have given more than a thought to this effect of oil. Now that the adage has received the *cachet* of scientific consideration we may expect the speedy introduction of "greased travelling" by steamship. Perhaps this will be the nearest approach to "lubricated lightning" we shall ever enjoy!

IN supplement to our remark, in a recent issue, on Mr. John Wolfe Barry, C.B., we give, in the present issue, a portrait of this most distinguished engineer, together with some supplementary particulars of his career. Mr. John Wolfe Barry, who crowns a brilliant career with his work in connection with the Tower Bridge, is the fifth and



youngest son of the late Sir Charles Barry, R.A., and was born in 1836, and is, therefore, now in his 59th year, and the zenith of his professional powers. He was educated at Trinity College, Glenalmond, where his elder brother, the Rev. Alfred Barry, afterwards Bishop of Sydney and Primate of Australia, was sub-warden; and at King's College, London. To acquire a practical knowledge of work he was placed with Messrs. Lucas Brothers, the celebrated builders and contractors, and was afterwards articulated to Mr., now Sir John Hawkshaw. Whilst with this gentleman he was engaged as resident engineer on the bridges over the Thames and the large stations at Charing Cross and Cannon Street; and, as a fact, Mr. Wolfe Barry has done a considerable amount of work for railway companies, he having been the architect of St. Paul's and other stations on the Chatham and Dover system. On quitting Sir John Hawkshaw's service in 1867, he commenced to practice on his own account, and has carried out the Lewes and East Grinstead Railway, the Earl's Court Station, and the Ealing and Fulham extensions of the Metropolitan District Railway, the new bridge over the Thames at Blackfriars, the railways for the completion of the "Inner Circle" of the metropolis, in conjunction with Sir John Hawkshaw; the Barry Dock, near Cardiff, which is the largest single dock in the United Kingdom, and railways connecting it with the South Wales coal-fields, and a large number of less important undertakings. Mr. H. M. Brunel, son of the late Isambard Kingdom Brunel, and grandson of Sir Isambard Brunel, joined Mr. Barry in partnership

in 1878, and has been associated with him in most of the above-mentioned works. In 1872, Mr. Barry visited the Argentine Republic, and laid out a railway from Buenos Ayres to Rosario, and in 1886 the Government appointed him on the Royal Commission on Irish Public Works, and important legislation based on the reports of the Commission has taken place on the subjects of drainage, light railways, and fishery harbours. In 1889 he was nominated, jointly with Admiral Sir George Nare, K.C.B., and Sir Charles Hartley, K.C.M.G., on a commission ordered by Parliament to settle certain important matters connected with the river Ribble; and in December, 1889, he was appointed by the Government on the Western (Scottish) Highlands and Islands Commission, a body having similar objects to those of the above-mentioned Irish Commission. Mr. Barry is a member of the Council of the Institution of Civil Engineers, a member of the Institution of Mechanical Engineers, an associate of the Council of the Surveyors' Institution, a fellow of the Royal Institution, and a lieutenant-colonel of Volunteers, besides being the author of a few works—the whole making up a busy and brilliant career, which we hope has many more years yet to be added to it.

Down in Chelsea, snugly away in a little side alley, suggestively known as The Vale, you may find Mr. T. Stirling Lee quietly at work. Mr. Lee gave a demonstration lecture on Friday night, at the Architectural Association meeting, on "The Use of Sculptural Decoration at the Present Time;" but it is rarely he comes out of his shell. It is as likely as not you may find a notice on Mr. Lee's studio door begging of you to neither knock nor ring. Mr. Lee has been busy on his panels for St. George's Hall, Liverpool, and we hear a whisper that Mrs. Grundy has been somewhat overcome by Mr. Lee's introduction of the nude. Liverpool is a little Pecksniffian at times, but Mr. Lee is so kindly disposed a man he may speedily be forgiven.

MR. H. STACY MARKS, R.A., has ventured a prediction upon British Art. He is a bold man, with an eye dipping into the future, and he finds that the twentieth century is going to be "bright." We are glad to hear it. Mr. Marks' optimism is encouraging, and the only little difficulty to be overcome is the "commercial depression" from which the country is generally suffering. But "depressions" have acquired the bad habit of lingering, and both varieties—industrial and climatic—are unwelcome guests. A very general acquaintance with trade points to the possibility of recovery, but it will come slowly. The "baneful influence upon the Arts" will not rise like a thunder-cloud. Mr. Marks realises that book and newspaper illustration has the most cheerful and immediate outlook. In painting and sculpture Mr. Marks says: "But allowing that we have few geniuses in our midst, we have many Artists of great and varied talent. In sculpture, study has become more serious and conscientious, with more learned rendering of form, and greater appreciation of beauty."

EVEN more pertinent are the remarks of Mr. Marks upon architecture, contained in the excellent article in *Great Thoughts*. "The most unobservant," he says, "cannot walk along the streets of the Metropolis, or of any of our large provincial towns, without being struck with the fact that architecture has advanced, by leaps and bounds, from the lame and impotent abortions so characteristic of the earlier days of the present century. A few brief years rolled by, I see, in fancy, a day when our towns and cities will be made beautiful, when our public buildings—Architect and Painter working harmoniously together—shall present a combination of

stateliness and symmetry; when our squares and open spaces shall be enriched with fountains, and with statues freed, by the aid of science, from the grimy blackness and negro-like aspect consequent on exposure to fog and filthy air; and when the people will be educated to admire rather than to injure a monument." This reads a little like a rhapsody, but we should welcome the time. Mr. Marks suggests many scientific panaceas, but his frank-hearted enthusiasm has not soared to the skies. Perhaps someone else will decide as to the manner of their scouring!

ELECTRICITY has won a victory over cable traction. The Leeds Corporation, acting on the report of their special sub-committee and the estimates of the City Engineer, have finally decided in favour of the electric system for the local tramways. Three rival systems were in the field, but practically the choice lay between cable traction—similar to the system at work between Kennington and Streatham Hill—and the electric system, which has been preferred. The estimated initial cost of the latter is £378,499, as against £428,922, the initial cost of the cable system. The annual cost of working shows a like advantage in favour of electricity, the estimates respectively being £90,072 and £101,819. The former estimate, however, is said to be based on the assumption that the overhead wire system would be adopted throughout, whereas the sub-committee recommend that in the centre of the town the conduit system should be substituted. The conduit system is, without doubt, the better fashioned, the wires being carefully stowed away. We have seen the overhead wires at Leeds, and distinctly regard them as we should Dr. Fell—with dislike. There is something clumsy and cumbersome in the very appearance of overhead wires, and in America they have distinctly proved a danger.

At Oxford, Mr. Ruskin was sometimes suspected, we believe, of partiality for particular pupils; but, according to Dr. Furnivall, who supplies some interesting particulars, his attention at the Working Men's College was given to all alike. "He used," we are told, "to teach every man singly; sit down on each man's stool in his turn, show him where he was wrong, praise him where he was right, and chat in the most pleasant and friendly way. It was a treat to hear and see him with his men. When he found a fellow with brains and love of art, who wanted to work at it, Ruskin put the student in the way to get it, and didn't spare his money for

the purpose. One man abused his kindness and did nothing, though Ruskin kept him on the Continent for some fifteen years, while the man professed to be studying and painting. But the rest—Allen, Ward, and Bunney—were great successes. Ruskin's only inducement to keep at the college was his own generous nature. He took infinite pains over, and interest in, the work, and spent a lot of money upon it." There is much incidental evidence of Mr. Ruskin's generosity and thoughtfulness. He found Mr. Ward pupils, sent him to the sea-side when he was ailing, and enabled him to go on sketching-tours on the Continent. For another working-men's drawing-class, started in 1861, Mr. Ruskin provided all the neces-

it were mechanical; what he did find fault with was want of perception. A student once came with his copy of a 'Liber Studiorum' etching, in which he had entirely missed the feeling of Turner, and Mr. Ruskin, looking at him searchingly, asked him if he had been ill."

HERE are a few extracts from letters of general interest. Mr. Ward had written from Tenby; Mr. Ruskin replied: "I don't call cliffs 200 ft. high insignificant; in the Alps I should call one diminutive that was under 1,500 ft. The last I saw there ran up 9,000 ft. in a great concave. But a 200 ft. one is as 'significant' if you have feeling for it." At another time he writes to Mr. Ward at

Dinant: "I was sure you would enjoy the Meuse and the Flemish architecture; and, for my own part, I can assure you that, though for general enjoyment in natural beauty and for exercise, I go to Switzerland, for purposes of art I should rarely go beyond the French and Flemish landscape and buildings. A river is, in most of its circumstances, far more picturesque than any lake. You get two shores dove-tailed together instead of a single independent one with an horizon-line, and the motion of the water and traffic furnish endless incident."

ARCHITECTURALLY, the Chapel Royal, St. James's, is one of the least pretentious of the historic buildings of London. Its boxlike form, and its plain, almost forbidding, exterior, are in the worst style of the Georgian era. Nor is the interior more calculated to impress the visitor. There is a fine ceiling, divided into small painted squares, attributed to Holbein; but, otherwise, the adornments are of the plainest description. High-backed oak benches, as uncomfortable as they are ugly, occupy the floor space, and running round three circles of the building, are galleries, much after the style of the old-fashioned meeting-

house. In the last century, the Chapel was much frequented by Royalty. George III. worshipped there regularly when in London, and in the literary records of the period we have an interesting description of how he proceeded to his devotions, with a nobleman carrying the sword of state before him, and herald, pursuivants, and other state functionaries marching in his train. If we are to believe Madame D'Arblay, the service was better appreciated by the King than by his suite. The latter would drop off one by one, until his Majesty, the parson, and an equerry were left, in the words of this lively lady, "to freeze it out together." In later years the Chapel has been similarly used by



CATHOLIC CHURCH, FOLKESTONE.—MR. LEONARD STOKES, ARCHITECT.

sary materials. "I get requests now," he wrote in the following year, "on the average for about £50 a week, and all difficult to refuse."

MR. RUSKIN'S great object as a drawing master was to make his pupils feel and see the beauty in things. "He made everything living and full of interest, and disliked service copying and 'niggling.' Excessive care he admired, but not work for work's sake. To show this, he would make a rapid drawing by the side of a student's work, that he might see how, with all his elaboration, he had mixed the 'go' of the thing. He never cared to find fault with your method, unless

members of the Royal family who have occupied apartments in St. James's Palace, and it has also occasionally been the scene of memorial services on the occasion of the death of Royal personages. For these purposes of purely domestic worship the edifice is not badly adapted; but it is most unsuitable for a state ceremony of an important kind. At the outside not more than 400 persons can be squeezed into it at once, and it does not afford the least scope for effective display.

FOOTPATHS, bridle-paths, rights of way and private roads have ever been the bogie of the builder. There is something intolerably annoying in the discovery of an ancient "right" at the very corner-stone, so to speak, of a projected building. What business has the "right" to be there? is a paradoxical but sound question. Sir Robert Hunter has a jealous eye. Moreover, he desires a "run" on such cat-like optics. He dwelt lingeringly on "Footpaths" at Toynbee Hall, on Saturday night, and was all in favour of ancient rights of way and past-time privileges. Some people, of an enquiring turn of mind, had definitely asked Sir Robert "What was a footpath?" The thing is sufficiently obvious to the ordinary intellect, but we bar the legal mind. The legal mind is very maudlin upon footpaths. But Sir Robert Hunter, of stout heart, set forth to essay a definition comprehensive in its note of finality. "A footpath was a public right-of-way for foot passengers, and was dedicated by the owner to their use. It was a maxim in law: 'Once a highway always a highway,' so, therefore, each dedication need not be proved by deed or act on the part of the landlord." We expect the ordinary person will now ask—having plenty of leisure—"What is a highway?" and we are not sure that the Law can answer. For ourselves we have known even highways to be closed, but we are aware that this is a humorous country. In parenthesis, many highways belie even bye-ways in condition, but we presume that Sir Robert Hunter's clarity of legal conviction will now set no small herd a horseback, riding down old walls and beating through recent fences. By all means let us retain our footpaths: English Right of Way is above and beyond mere considerations of convenience.

A CHAT WITH LEONARD STOKES.

A RUB FOR THE ACADEMY SCHOOLS.

"I POSITIVELY hate terra cotta," said Mr. Leonard Stokes, F.R.I.B.A., as he stood by the fireplace in one of his quaint little rooms in Westminster. It seemed to me he soon got up steam. "I loathe the way it is commonly used; the endeavour to imitate stone. There are situations in which it may be tolerated, but terra cotta is not true nor dignified. It is impossible to obtain accuracy of line—take the attempt to build pillars of it and look at the result! Nothing but messy littleness will suit such a material. But you must not mention terra cotta to me; it has got me into too much trouble already!"

"Then I may describe the effect upon you as that of the proverbial red rag!"

We both laughed, and Mr. Stokes confessed:

"Well, you know, I am a bit of a firebrand and I love to stir things up. But terra cotta is my *bête noir*. The leases fall in in Regent Street in a year or two, I believe, and I expect we shall have an end to inoffensive stucco. Flats and terra cotta will reign rampant, but the second state of that street will be worse than the first."

I had had time to look round the artistic little room with its drawing board inspired by a distant view of the Clock Tower and by

countless crooked chimneys in the middle distance. The warmly tempered walls were bright and gay with impressions in oil, vigorous canvases by Mr. Stokes' brother Adrian, the well known painter. Here a harvest moon rose full upon sheaves of corn, and there sea and sky seemed meeting in a mystery; "sketches," Mr. Stokes called these kindred things. Chippendale chairs gave you honest support, and an old carved chest contained many drawings.

I charged Mr. Stokes with having had a birthplace and he admitted it. He could not tell the hour; not being a Royal Academician by birth it had not been chronicled, but he came into a dingy world at Southport, pretty well thirty-seven years ago. His recollec-



tions are mainly of sands and donkeys until he came up to London with his people, in 1871, and began his three years' training with S. J. Nicholl, in 1874. Later, he spent some time with James Gandy, quantity surveyor; became clerk of works under Street at Christ Church Cathedral, Dublin; did work for Colcutt, Bodley, and Garner and St. Aubyn, and obtained the Pugin Travelling Studentship in 1880. Mr. Stokes has strong views concerning the Royal Academy Schools.

"They want re-organising. They are dull as ditch-water. I advocate a thoroughly efficient and energetic staff of masters, and the Schools should be open in the daytime. Fancy a Royal Academy open but two hours a night for three nights a week! It is ridiculous. The Schools and the masters want to be brought more in touch with modern ideas and architectural requirements, and the students should draw from the life amongst other things; at present the classes are very

perfunctory indeed. I wish you could get Mr. Norman Shaw to take the matter in hand. He is the man to rouse the Schools out of their lethargy, if he would only take the trouble. Street did it, and thoroughly remodelled the system while he was there, but of late years things have slipped back a great deal. The 'art' side of a young architect's training is neglected, while what I may describe as the 'Institute side' is well rubbed in."

"And the Association, Mr. Stokes?"

"The Association is a first-rate thing for the younger men. I should like just to say that although I have retired into what, I suppose, may be described as private life, I still take great interest in the Association. You know I was president for two years, and vice-president for two more, besides serving on the committee for six years as well. Since the Association was rebuilt it has done, I think, an excellent work on the lines of education as opposed to cramming."

"Then you don't believe in cramming?"

"I do not. I think a man should absorb and assimilate his knowledge by slow degrees; then you may reasonably expect individual and sincere results. Individuality may be slow to succeed, but it is what we want in architecture."

Then I knew I trespassed upon ticklish ground when I breathed the word "Institute!"

Mr. Stokes has little or no quarter for the Institute, laughingly remarking that he was "too hot" for that august body, but he wished someone "would stir up that Institution." I suggested that "firebrands" were known to be inflammable. Possibly Mr. Stokes would himself direct the battery! But he did not unmask his artillery. We fell to talking of less polemical matters. Mr. Stokes confessed to a predilection for ecclesiastical work, and showed me several charming drawings of Roman Catholic churches of which he was the Architect, notably St. Clare's church, in Sefton Park, Liverpool, and a church in Folkestone.

Mr. Stokes gives one the impression of a keen controversialist, a man of individuality and artistic as well as architectural feeling. He has no patience with the slow moving and the easy going, and his description of himself as a "firebrand" may be taken either as a confession of innocence or of guilt.

THE Secretary of State for Foreign Affairs has received through H.M. Consul at Cadiz information to the effect that the Seville Waterworks Company, Limited, will receive up to March 8th, tenders for the supply of material and construction of a footbridge over the River Guadalquivir. Printed specifications, estimates, and conditions may be seen at the Commercial Department of the Foreign Office, S.W.



NAZARETH HOUSE, BEXHILL.—MR. LEONARD STOKES, ARCHITECT.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

THE EDITOR does not hold himself responsible for the opinions of Correspondents, whose communications should be brief and plainly written on one side of the paper.

THE BUILDERS' JOURNAL goes to press on Monday at 6 p.m. All matter must reach the Editor by the first post on Friday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments. Subscribers in London or the Suburbs receive their copies by the first post delivery on the day of publication.

Advertising.

CHARGES FOR ADVERTISEMENTS.

SITUATIONS WANTED.

Per line (about 10 words), Sixpence.

Minimum charge, Eightpence.

Three Insertions for the price of Two.

SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS, TRADE AND GENERAL ADVERTISEMENTS.

Four lines (about 40 words), Three Shillings.

Each additional line, Sixpence.

Prepayment in the above Advertisements is absolutely necessary.

The charge for Paragraph Advertisements on the Front Page is Fifteen Shillings an inch, single column. Minimum charge, Five Shillings. Paragraph Advertisements on ordinary page, single column, Seven Shillings and Sixpence per inch.

MANUFACTURERS' ANNOUNCEMENTS ON ORDINARY PAGES.

Per Page, Single Insertion, Eight Guineas.

Discounts for series on application to the Manager, who will make Special Contracts for Announcements on Back and Leader Pages and positions facing matter.

NOTICE.—Advertisements for current week's issue are received up to last post on Saturday. Alterations in standing Advertisements must be made before 6 p.m. on Fridays.

Advertisers in THE BUILDERS' JOURNAL may have their replies addressed to the Manager's Office, free of charge, and may have them forwarded if addressed envelopes sufficiently stamped are sent.

Reading Cases, lettered in gold, may be had from the Manager. Price, One Shilling.

Editorial and Publishing Offices:

Talbot House, Arundel Street, Strand, W.C.

The Builders' Journal.

MEN WHO BUILD.

No. 4.

MR. ERNEST GEORGE.



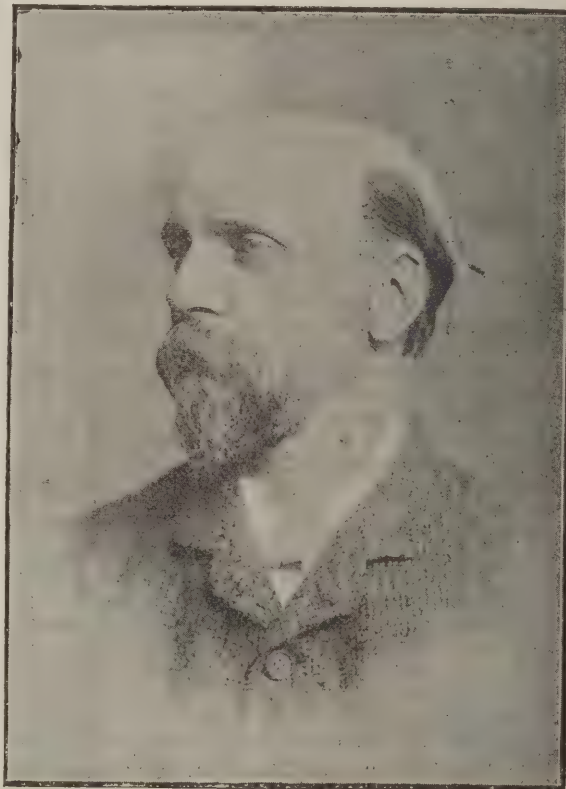
It must be nearly ten years ago when you begged permission to join a merry party of men bound for the delightful scenery of Crawley, in Sussex, and

Ernest George's latest masterpiece of "Buchan Hill," which he had just completed for M. Saillard. You linger yet with the memories of a delightful day. The broiling walk from the station straggled out the little band of forty enthusiasts, until the dusty Sussex lane seemed dotted for a mile or more with the broad cloth of Conduit Street. Cole Adams, and Beresford Pite—he had not then migrated from Bloomsbury to more aristocratic quarters in Hanover Square—Francis Miller—the man of figures and price books, and a poet, too, forsooth—Atkin-Berry, the then genial hon. sec. of the A.A., a man of never-wearying kindness, and thought for others—George Blagrove—now with an "ism," and a haunter of the reading rooms of Bloomsbury—"Maurice B"—whose bland countenance is still a redeeming feature of the monotony of Bedford Park—and a dozen others who have drifted from your ken, were of the party. Your heart is keen on the beauties of Buchan Hill. As they enthralled you then, they enthrall you now. So intently did you study the charm of that lovely hall, and the corridor which ran along the north front, the beautiful paneling and the mullioned oriels of the drawing rooms; the oak staircase—which you are fortunate to be able to illustrate—and the amazing perfection of the kitchen and "domestic arrangements" of the delightful house, that you well remember being locked in by the watchman on duty, and having to drop, in a very undignified fashion, over the wall of the servants' yard, to regain the party.

What emphasizes Ernest George's work, as much, perhaps, as its distinctive charm, is the extraordinary attention he gives to minute things. Like poor George Street, nothing is too insignificant in a house for

his personal touch. To the handle on a coal cellar door, Ernest George is in evidence. To him a moulding is a moulding, a thing of beauty and a joy for ever, and so his mouldings under a pantry shelf are as refined as are their more fortunate sisters who exist in the aristocratic surroundings of my lady's boudoir. Ernest George is a master of small things, and that is why his houses are "equipped" so perfectly, and why he is such a master of domestic planning.

You do not know where Ernest George was born, but it is six and fifty years since that interesting event happened, and nine and thirty since he went to Samuel Hewett, of the Adelphi, to draw straight lines and



discover the difference between a brick and a paving stone. Samuel Hewett has not engraven his name upon the architectural records of his day, for he peacefully sleeps the sleep of the just, and none of his works have lived after him. It is evident, therefore, Ernest George got no inspiration from the Adelphi. When he was nineteen years of age he became a student at the Royal Academy; and the following year went home with the Gold Medal. At twenty-two he met Thomas Vaughan, just back from his tour through Europe, and so the youngsters started in practice on a third floor in Cannon Street. When the Albert Hall was first opened with



REDROOFS: MR. ERNEST GEORGE'S HOUSE AT STREATHAM.

A Local Government Board inquiry is being held at Southampton as to giving powers to the Corporation to buy up an extensive area of slum property in the ancient part of the town, and effect a vast improvement by the erection of workmen's dwellings and model lodging-houses.

MESSRS. E. WEBSTER and Co., of Radfield Quarries, Eccleshill, near Bradford, have secured for twelve months in each case, the supply of Yorkshire flags (self-tooled) kerb, channelling, etc., for the Corporations of Newcastle, Nottingham, and Walsall, and local corporations in the South of England.

an Architectural Exhibition, George and Vaughan showed their designs for a Mountain Villa and Bodegas, which the late Duke of Wellington was to have had built as part of his scheme for wine growing on his Spanish Estates; but this was never fully carried out, though it gave Ernest George his first opportunity of visiting Spain. This partnership with Vaughan, although fairly successful, did not long survive the third floor, and, eventually, Ernest George entered into partnership with a son of Sir Morten Peto, and thus laid the foundation for what was destined to be a very prosperous artistic arrangement. Mr. George has expressed his views, more than once, in favour of a system which is derided by many of those artistic fanatics who cannot see an inch in front of their eyebrows. Those who know Ernest George well, know that the frictions of architectural practice would soon wear away the polish of his art, and that is why he so strongly believes in the advantages of partnership, when wisely entered into with a man, whose treatment and up-bringing makes him competent to deal with the petty worries and complications which arise in actual work.

Poles, in Hertfordshire, for Edward Hanbury; at Shiplake Court, for Mr. Harrison; and Motcombe, Dorset, for Lord Stalbridge, a different rendering of the same treatment becomes apparent, and the simplicity of the true artist is carried sometimes to its extreme limits. But in his interiors Ernest George has unquestionably no superior;—it is a very grave point if there be his equal, grave indeed to those who, like yourself, worship at the shrine of one Norman Shaw—he casts simplicity to the winds, and every inch of wall space, not otherwise treated, he panels, as they did in the days before wall papers with pedigrees were invented, and people had got so shockingly modern in their domestic requirements. Mr. George is the only architect who has seriously touched upon the charms of etching, and his published works, illustrated by his own needle upon the copper, are well known. John Murray published his "Mosel and Loire"; Seeley his "Belgium," and the Fine Art Society his "London" and "Venice"; whilst every Londoner is acquainted with the chromo reproductions of his water colour drawings of bits of London architecture.

what active Fellow of the Royal Institute. He believes in sketching, it has such a refreshing influence on one's work, he says, and at every odd moment the sketch book is his companion. He does not believe it possible to examine a man architecturally. A man should be known by the structures he has built, and not by the drawings he may have made.

Great baskets of sweet-smelling logs appear in the rooms in Maddox Street, and the curling white smoke from the hearth lazily floats away into the unknown, as you saturate yourself more thoroughly with the works of Ernest George which appear upon the walls of the dimly lighted rooms. There is a son articulated to his father, and of whom much is expected. He has a fine ideal to aim at, the ideal of a pure Artist, and one of England's finest builders of the beautiful. Ernest George has devoted the whole of his life to the domestic side of his art, and he need not fear that his name will live far into the centuries to come. But if another century dawns, and Ernest George is still without the gates of the Royal Academy, a monstrous injustice will have been done to the Architecture of England.



MOTCOMBE, FOR LORD STALBRIDGE: ERNEST GEORGE AND PETO, ARCHITECTS.

There is no less assertive practitioner than Ernest George, and in his partner he found the antithesis to himself, although Mr. Peto is a man of extreme artistic culture and taste. The partnership thus wisely entered into lasted until three years ago, when worn out with repeated attacks of influenza and other troubles, Mr. Peto retired after fifteen years' incessant work; and Mr. Ernest George associated himself with Mr. Arthur Yeates, a gentleman of much business and commercial acumen.

Ernest George makes a picturesque centre figure in a picturesque room in Maddox Street, and the German shutters with wrought German hinges, which subdue the light from the German glazed windows, seem to take one to the origin of the peculiar style of nineteenth century work which he has made his own. It is idle to disregard the north German feeling which has crept into his work, a feeling most rampant in the Cheapside elevation for Messrs. Hill, and in some of the houses in Collingham Gardens, South Kensington. When, however, Ernest George gets fair play for his pencil, in such instances as at

Ernest George makes all his perspectives with his own hand, but more charming than these, even, are those delightful elevations, strongly washed in sepia, which are likewise peculiar to him. He is a most rapid draughtsman and colourist, always stands at his work, and matures most of his brightest conceptions at Redroofs, on Streatham Common, a front view of which is on the preceding page. The internal arrangement of Redroofs is distinctly clever, and you regret Mr. George strongly requested the plan should not be given. It possesses some remarkably fine paneling in the actual spirit of the fifteenth century, and the studio which is 45 feet in length is, perhaps, one of the finest rooms its owner ever completed.

Ernest George is too much occupied a man to trouble his head about the winds which blow round professional societies and their controversies; all his leisure hours are spent with his sketch book, running round the towns and villages of Europe when time and circumstances permit. From its formation, he has been a prominent member of the Society of Painter Etchers, and a some-

THREE plans for a new covered market at York have been prepared by the city surveyor, and will be submitted at the next meeting of the Corporation.

AN extension of the Institute at Ipswich was opened on Tuesday evening. The committee have acquired additional land at the rear, covering 50 ft. by 26 ft., and on this two stories of accessory buildings have been erected, comprising ladies' conversation-room, smoking-room, chess-room, and lavatories. Mr. William Eade, of Ipswich, was the architect, and Messrs. Girling & Coe, of the same town, were the contractors. The site cost £250, and the building operations £850.

THE contract for the alterations and improvements at Knot Mill Station has been let to Messrs. Robert Neil and Sons, of Manchester. The total sum is a little under £20,000. Operations will be commenced as early as possible.

THE Prescot Guardians have decided to order plans for the erection of a new infirmary at Whiston, at a cost of £35,000.

THE Town Council has received the sanction of the Local Government Board to borrow £5,100 for the purchase and laying out of the Crescent Estate at Harrowgate.

THE ARCHITECTURAL ASSOCIATION.

MR. F. W. POMEROY'S PAPER ON "PLASTER WORK."

A MEETING of the Architectural Association was held last Friday night at the Royal Institute of British Architects. The chair was taken by Mr. A. Beresford Pite, and there was a good attendance. The minutes of the previous meeting having been confirmed, the Chairman read the following letter from Mr. Young, who wrote regretting his inability to attend:—

"The subject of sculpture in architecture is a most interesting one, and one which I

in size, in treatment, and in relief, so as to form a harmonious part of the building which the sculptor decorates. I am afraid that in the present day, with a growing tendency to produce sculpture in buildings, we shall get, as we have in other things, a cheap and shabby sculpture. If we employ sculpture at all, we should take care that it is of the very best. It should be sculptor's sculpture, and not stone-mason's sculpture. My advice to you is to avoid this kind of sculpture, as well as all pretence or sham art. If you cannot get the real article do without it.—Yours faithfully,

WM. YOUNG."

decoration at the present time. A great many people, he said, had an idea that there was no use whatever for sculpture, and to show how the subject had been neglected it was generally found that the carving on a building was the worst part of the whole structure. If they put such fearful work into any other part of the building it would certainly be condemned. If they went to the British Museum they would see that the ancients understood the proper use of sculpture. The ancients used it to show the reason of their buildings, in the figurative language, the symbolic language, a language that could be understood. From the very



SHIPLAKE COURT.—ERNEST GEORGE AND PETO, ARCHITECTS.

have done my best to promote, not only in talking and writing, but in actual work, because I believe in it. Sculpture in building has, in my opinion, been too much neglected, and

ORNAMENT HAS BEEN OVERDONE.

One would rather see, in a building, a small amount of really good sculpture, than a large amount of ornamental work. At the same time one must not forget that sculpture on any great scale can only be done on public or monumental buildings; in domestic work it is not likely to hold a large place. I think it is the place of the architect to produce sculpture in place of ornament whenever he has the opportunity, or rather, he should try and make the opportunity. The question of cost is undoubtedly a difficult one to overcome, but I think if we, when the opportunity of using sculpture occurs, put clearly and forcibly before our clients the difference in result and value between sculpture and ornament, this difficulty may be overcome; at least such is my experience. But granted the opportunity to employ sculpture, which is the grandest decorative aid to architectural design, we must take care that it is not merely figure carving in stone, but sculpture of the highest class which we must aim at. In my opinion, sculpture in architectural work brings out the highest qualities of the artist. There he deals with its conception, with its composition, with its proportions, without going into the elaboration of too much detail. For sculpture in architecture should first of all be broad and very simple. It is also necessary that it should be to a scale, both in size and relief, proportionate to the place in the building which it occupies. One has seen in many of the recent efforts to adopt sculpture in buildings, figures of such a small size and so out of proportion to surrounding work, that they look like toy figures, only fit for the Lowther Arcade, and forming no part of the architectural scheme. Not only should the scale be proportionate to the building, but it should not be any random figure stuck in any place, but the whole should be part of a scheme, both in subject,

NEW MEMBERS.

Mr. P. W. Meredith, 38, Woburn Place, W.C., and Mr. J. W. Abraham, 80, Hanley Road, Stroud Green, N., were elected members of the Association.

SCULPTURAL DECORATION.

Mr. T. Stirling Lee then delivered an interesting address on the use of sculptural



BUCHAN HILL.—HALL FIREPLACE.

earliest times when men drew forms on pieces of bone we had always had in our brains something which compelled us to express our thoughts in that way. That was the faculty of thought, of form, and of expression, and the question was how were they going to use it. With regard to big buildings, what could not be written on them! Mr. Lee based his subsequent remarks on the sculpture of St. George's Hall, Liverpool, some of which he designed. He explained how he thought out the subjects for a frieze, and modelled his ideas in clay, and then had to make them harmonize in line and thought with the building itself, and said, if they were going to do anything original it must have

THE DEEPEST THOUGHT TO START WITH.

Light and shade governed the work entirely, and another great factor to be considered was the lines. People were beginning, he was glad to say, to recognise that they could decorate their houses with sculpture, and by putting permanent beauties into their buildings. He thought a chimney-piece was a charming piece of work; but, if they designed a house with a feature like that, they must consider that it should be lighted well. The sum and substance of his advice was that if any of them had an opportunity of doing a feature-like decorative work, they must consider how it was going to look afterwards.

PLASTER WORK.

Mr. F. W. Pomeroy's paper on "Plaster Work," which was then read, was an exceedingly useful one. Plaster of Paris, used by sculptors and others for taking casts, &c., was, he said, well known to the ancients, who obtained from Syria, and probably from other countries, a stone called by Theophrastus "gypsos," which resembled alabaster, and which was converted into plaster by burning in a suitable furnace, grinding and sifting. Having explained the composition and manipulation of various kinds of plaster, Mr. Pomeroy said many architects desired that their ornament should be modelled *in situ*, and he was fully aware of the importance

of this, but had always found that it was quite impossible, under the present condition of buildings, to carry out entirely a design of an elaborate nature, such as

FIGURE WORK, OR INTRICATE FOLIAGE.

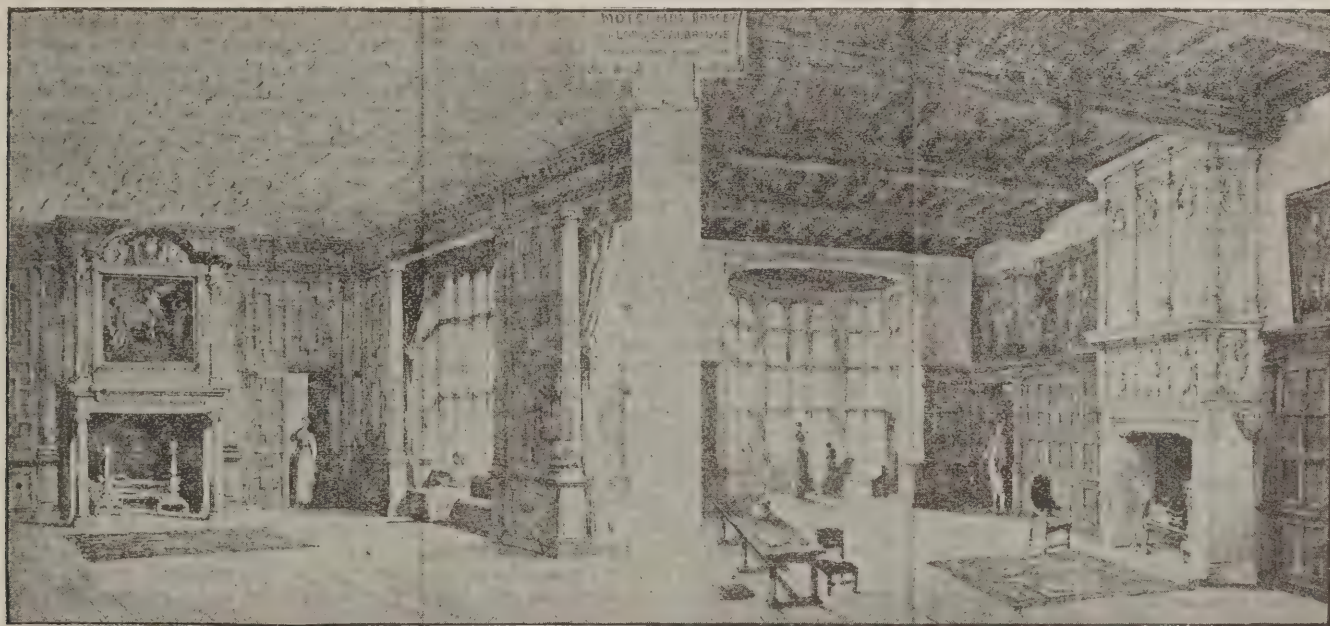
Unless one had time for thinking and maturing, a simple design only was possible; and the plan generally adopted was to model, in clay or wax, a piece sufficiently large to form an idea of the scale and projects of the modelling, and offer it up in something like the position it will eventually occupy. But reflected lights, and other reasons, demand that the work should always be considered in a liquid state, i.e., to be worked on and completed after it is fixed. This may be said to apply to all architectural decoration. Where the windows run up close to the ceiling, he found flat or low relief most agreeable, and very high relief was never desirable because it harboured dirt and dust, and threw shadows which became very troublesome to the people who had to live in the room. The charm of much of the old ceiling work, he ventured to think, was enhanced by the many coats of paint, or whitewash they had received, which had stopped up the small blacks in the work, and accidentally given

his particular piece of work "sing-out," without any regard for the *ensemble*. For repeating ornamental plastic models, gelatine, wax and piece moulding in plaster are the methods usually employed. Gelatine is the simplest and best when only a few casts are required, as it can be done without any complications in the case of undercutting; wax moulds are generally used for the so-called fibrous or canvas casts of commerce. Piece moulding is a more complicated way of obtaining reproductions, and is used by moulders who may desire to preserve their moulds for future occasions. For work executed *in situ*, a mixture of Parian cement, well-burnt slacked lime, putty and silver sand is used, but this is more properly stucco-duro. Stucco-duro, as practised by the Italians, is a very ancient method, and is mentioned by Vitruvius. It was almost lost, but was revived again in Italy in the sixteenth century. Raphael and Giovanni da Udine were then so interested by the discoveries during the exhumation of the Baths of Titus, under Leo X., that they at once made experiments in this material, and the loggia of the Vatican was one of the first results. It was composed of plaster of paris, silver sand and marble

netic or parian cement and silver sand carefully mixed together, is laid on very thinly, and the design is cut into the surface of the second coat with a steel scraper. Care must be taken in the cutting, which should be done with slanting edges which give roundness and softness to the finished work. A good draughtsman would have but little trouble in learning this kind of work, and it should commend itself to architects for its durability. Gesso is yet another way of using plaster, but this more properly belongs to the painters' art and is most successful when confined to very low relief work, such as the decoration of frames, caskets, panels of cabinets, &c. There are many kinds of gesso, and fine examples may be seen in Kensington Museum. For bold work plaster of paris and thin glue or size water are used, and for fine work a liquid, composed of whiting previously soaked in water and mixed with linseed oil and a little resin, is used and is laid on with a brush. It can be made very easily and a few experiments will ensure success. He had used

A VERY GOOD POWDER

called "Denoline," which sets hard and slowly and sticks fast—great virtues in gesso. Whiting and parchment size is the gesso used



MOTCOMBE, FOR LORD STALBRIDGE.—INTERIOR OF DINING ROOM AND HALL.

breadth to the whole; and much modern work would be improved by the same treatment. He had tried in ceiling work that he had been engaged on lately, to avoid sharp undercutting, and where undercutting was necessary to give accent to the design, it should be done with a round instead of a sharp edge, and a much softer shadow was obtained. But as each fresh work was a new problem, so the modeller, to have the true decorative spirit, must constantly bear in mind the general scheme of the mouldings that surrounded his work and governed the scale. Perhaps the most noticeable feature in modern surface decoration was overcrowding; and one of the greatest difficulties of the designer was to know

HOW MUCH TO LEAVE OUT

rather than what to put in. Indeed, the designer who understands this quality had got through his troubles, and the value of an occasional plain space cannot be overestimated. Of course, the well-trained figure sculptor understands the value of tone, light, shade and envelopment, but unfortunately the ordinary carver has little or no time allowed to consider such abstruse problems. Consequently his only idea is to make

dust, and was capable of taking a high polish. It can be used for the finest work; and, in fact, is used by modellers for goldsmiths' work as less liable to injury than wax. A

STUCCO COMPOSED

of plaster and glue water is used by modern sculptors, and is preferred to clay for very large work. Mr. Watts modelled his great statue of Hugh Lupus, for Eaton Hall, in this stucco, and the groups in the Trocadero, in Paris, by Falguiere, were modelled in the same material. Stucco work was much employed on the palace of Nonsuch, built by Henry VIII. It was executed by artists brought from Italy, but every trace of the palace has now disappeared. The artists, however, left their influence, and stucco was employed to decorate houses until the end of the reign of Charles II., when it began to decline. Graffits or Sgraffits is another way of decorating by means of prepared plaster grounds, cutting away or scratching through the upper surface and revealing in parts a back-ground of a different colour. The first coat is made of sharp sand and portland cement, and the second coat is usually coloured with Indian red, yellow ochre, or manganese black. A final coating of sele-

by frame makers; and ordinary house-painter's putty worked up with whiting, oil and water is also used for scrolls, &c. Mr. Pomeroy concluded his lecture, which was full of most valuable information as to the best means of preparing, mixing, and modelling plaster, and which explained some of the most important uses of plaster for decorative purposes, by saying that to become thoroughly acquainted with any particular work the student should spend a short time in the workshops, for the secret lay not in the tools or the materials, but in the hand and brain of the worker.

At the close of the lecture Mr. Pomeroy and his assistant proceeded to demonstrate some of the methods of casting, and Mr. Pomeroy also exhibited a photograph of part of a frieze he designed for the Sheffield Municipal Buildings. The frieze illustrated the various arts and manufactures of the district, and Mr. Pomeroy added, the subjects were all taken from Nature.

DISCUSSION.

Mr. Statham, of *The Builder*, in proposing a vote of thanks to Mr. Stirling Lee and Mr. Pomeroy, said he sympathised with the general views expressed by Mr. Lee. If

they had cheap sculpture, either the sculptor was cheated or else the buyer was. There was far too much sculpture which had the appearance of having been turned out by the dozen. It should justify its position on a building by having some reference to it; and its lines should harmonise with the lines and shadow projections of the building. It had always been a puzzle to him to know why the Greeks put the frieze of the Parthenon at Athens in low relief, right on top of a wall and under the shadow of a roof. He should be glad if Mr. Lee could give a reason for it.

Mr. G. H. Fellowes-Pryne seconded the resolution, and said it was always a temptation to an architect to see his building more or less complete, in the fear that if he did not see the sculpture put in during his lifetime, it would never be there. He considered that the expense of good sculpture was the reason it was not used to a greater extent, and the moneyed classes should be taught to know that good sculpture could not be bought cheap. He thought the sculptor and the architect should work more together, so as to understand one another's designs and feelings.

Mr. W. D. Caröe said sculpture should form spaces of light on a building and not of darkness.

The Chairman said it was extremely desirable that architects and sculptors should come into close touch in their work. Architects should understand how sculptors did their work; how they thought it out and studied the effects of light and shade. If they did that, and if sculptors took the pains to understand how architects did their work it would have very beneficial results. They had got into the mischievous habit of regarding certain ornamental sculpture as carving, and excluding from the high range of art any ornament that would not figure ornament. He did not think sculpture need be prohibitively expensive. He alluded to the death of the late Dr. Reginald Stewart Poole, of the British Museum, who was a great friend to the Association, and who said that the process of perfection in Greek art was the process of elimination—of eliminating all that was not absolutely necessary.

The vote was carried by acclamation.

In reply to a question by Mr. Statham, Mr. Stirling Lee said the sculptures at St. George's Hall, Liverpool, were composed of Istrian stone—an extremely hard stone. It was found that the original stone fretted away. With regard to the frieze at the Parthenon, he considered it was a wonderful study of reflected light. It was originally coloured in the background, and he thought the idea of the sculptor was very subtle.

The meeting shortly afterwards adjourned.

POINTS ABOUT FEVER HOSPITALS AT THE R.I.B.A.

MR. T. W. ALDWINCKLE gave a lecture on "Fever Hospitals" at the ordinary meeting of the Institute of British Architects held last week, Mr. F. C. Penrose in the chair. The lecturer said a fever hospital should be, if possible, outside the town or village for which it is intended. The question of transport of the patient is not so serious a difficulty as to outweigh the great advantages to be derived from the hospital having open fields rather than houses as its surroundings. Good ambulance arrangements will overcome all difficulties as to transport. The land should be capable of good drainage, and there should be the means for a good and ample water supply. There should be two entrances to the hospital, one "the infected entrance," and one the "non-infected entrance," both controlled from the same porter's lodge. A

wide roadway should run round the whole of the site, as a neutral zone to separate the hospital from the surrounding property. The axes of the ward pavilion should be, as nearly as possible, north-east and south-west, in order to provide for the maximum quantity of sunlight and the minimum of shade. This is of the utmost importance, and should be carefully borne in mind in the selection of a site. The ward pavilions should not, where practicable, be more than one story in height. He did not suppose that any experienced hospital architect would, by choice, place fever wards one above the other, necessitating, amongst other evils, much traffic up and down staircases, to say nothing of the obvious objections from a sanitary point of view, so that considerations of land area could be the only reason. The whole of the several buildings of an infectious hospital should be completely isolated, and stand perfectly free, without communicating corridors or covered way of any kind. This was not suggested as an experiment, but as the result of personal observation in the case of several excellent hospitals, such as the Eppendorf Hospital, Hamburg; the Moabit Infectious Hospital, Berlin; the Frederickshain Hospital, Berlin; the Urban Hospital, Berlin; the Belvidere Hospital, Glasgow; the Grafton Street Infectious Hospital, Liverpool. It would doubtless be admitted that in an infectious hospital complete and absolute isolation of each ward pavilion, at least, was most desirable, and there should be good reasons adduced for in any way impairing such isolation by the introduction of communicating corridors, even with open sides. It was stated by some hospital authorities that these covered ways are necessary in order to protect the staff from the weather; but, apart from the fact that they are wholly inefficient for such a purpose, the authorities at the hospitals which he had mentioned as being without corridors or covered ways had all assured him that the staff experienced no ill effects or inconvenience whatever from their absence. The complete isolation of the buildings is recognised and prepared for, the nurses and others dress accordingly, and the arrangements for conveying hot food from the kitchen to the wards are so well considered and complete that the food is, in all probability, hotter when it reaches the wards than in the other cases. There should be a clear space of at least 3 ft. between the underside of the ground floor of all wards and the adjoining yard level, and the space thus left underneath the floor should be paved with tar paving. In the acquisition of a site for a fever hospital, the question arises as to the number of beds per acre that can safely be provided. For larger hospitals, he did not think that the maximum should exceed 20 beds per acre. At the Belvidere Hospital, Glasgow, there are 17 beds to the acre; at the Grafton Street Infectious Hospital, Liverpool, 34 beds; at the Moabit Infectious Hospital, Berlin, 40 beds. The requirements of large towns necessitate the provision of a large number of beds; but it is an open question, whether the aggregation of large numbers of acute infectious cases upon one site is desirable, and whether it would not be a preferable course to arrange hospitals for a smaller number of beds, and to increase the number of such hospitals in order to provide for the total number of beds required. If, e.g., the population requires a provision of 400 beds, he would suggest the erection of two hospitals for 200 beds each rather than one for 400 beds; and where the required provision is for 750 beds, three hospitals of 250 beds each might be preferable to two of 375 beds. Indeed, a maximum of 300 beds suggests itself as desirable. Having given illustrations of the various types of existing fever hospitals, Mr. Aldwinckle said there should be two entrances to an infectious hospital,

each controlled by the same porter's lodge, which should, in fact, stand between them. One to be called the "infected entrance," leads to the hospital proper; and the other to be called the "non-infected entrance," leads to the official department, stores, and staff quarters. There should be two receiving wards: one for scarlet fever and one for diphtheria and enteric fever. These two wards should not adjoin, but should be as near as possible to the wards of their respective diseases. Each receiving block should contain a good-sized and well-lighted receiving and examination room, with a bathroom adjoining (the doorways to these rooms being wide), together with a room for the ambulance nurses, to which should be attached in each case a warmed store for blankets and gowns. There should also be a waiting-room for friends of patients, where they put on a wrapper and cap before visiting the wards, as also a lavatory where they can wash before leaving the hospital. There should also be a small room properly fitted up for bacteriological examination in connection with the reception of patients. The warming and ventilation of the ward must be considered together as one operation. This subject must also be dealt with in close relation to climate. The key to the whole position is that for at least 300, if not 330, days in the year it is possible for us to open the windows of a hospital ward without danger or discomfort to the patient; and we must keep this fact prominently in view when dealing with the question of ventilation. In considering the warming and ventilation of a ward pavilion, it is essential to begin with the principle that the wards and their adjuncts (except, of course, the larder) should all be kept very much at the same temperature, in order to avoid draughts being caused by the opening of doors. His own experience was most strongly in favour of low-pressure water apparatus, the water circulating from a steam-heater placed in the basement of each ward pavilion. The wards, then, should be warmed (a) by open ventilating fireplaces, and (b) by the diffusion of fresh external air, warmed by passing over hot-water heating surfaces in the wards. Objections are urged against open fireplaces, on the ground that it is a wasteful means of producing heat; but he thought that this drawback is much more than compensated for by the cheerfulness of the open fire, and by the very important fact, too frequently overlooked, that an open fireplace, with a fairly good draught in the chimney, is about the best exhaust ventilator that can be found, and one that acts near the floor level. The cost per bed of a fever hospital is a subject upon which much definite information cannot very well be given, as the standard of hospital requirements has been considerably raised of late years, and is apparently still rising. One important element in this connection is the largely-increased accommodation provided for the hospital staff, as well as the largely-increasing proportion of nurses to patients.

MORE than half the world's supply of tin is mined in the Straits Settlement at the tip of the Malay Peninsula. The output in 1891 was 36,061 tons, out of a total of 56,651 tons; 12,106 tons came from the Dutch East Indies, chiefly from the Island of Banka, leaving only 8,384 tons for the rest of the world.

By a large majority, the Guardians of Leigh-Lancashire, have decided to erect new board, rooms and offices at a cost of £5,200, and new laundry, trampwards, &c., at a cost of £5,000. Messrs. Mangnall and Littlewoods, architects, Manchester, have been instructed to prepare plans and specifications. The board-rooms and offices are to be erected near to the workhouse at Leigh.

THE FIRST PERIOD OF ENGLISH ARCHITECTURE.

"ENGLISH Architecture of the Middle Ages," was the subject of a lecture delivered by Mr. Arnold Mitchell, F.R.I.B.A., in the Public Hall, West Norwood, last week. Mr. Mitchell confined himself to one period of the Middle Ages, the 12th century, as it was impossible to do justice to the whole ground covered by the term the "Middle Ages," and the 12th century was really the beginning or first period of English Architecture. Taking a *Cathedral* as an example of a *Gothic Church*, he endeavoured to point out some of the Architectural thoughts that would pass through one's mind on entering such a building. The first thing was the nave with two side aisles; it is noticeable that these aisles are separated from the nave by a row of arches. At first sight these might appear to have been built for the sake of effect, but this was not the case, they are absolutely necessary as a part of the construction of the Church. Considering for a moment the purpose for which a Church is built,—to hold a great many people—it is evident that a large floor-space is necessary, and this floor-space has to be covered by an equally large roof. Now, it is not convenient to have one roof, and at this period it would have been impossible to build such a roof, so the building was divided into avenues or aisles. The partitions between the avenues serve the purpose of supporting the roof. The next point is that these solid partitions are replaced by arches, which produce those beautiful effects of light and shade we so much admire; though their purpose is purely utilitarian. The great charm about a Gothic building is that its outward appearance truthfully represents its construction. Above this first row of arches rises a second, and sometimes a third, this is called a triforium. The most beautifully lighted building in the world is the Pantheon at Rome, which has no roof and is lighted from the top by a dome. With regard to the roof in Norman churches there is usually found an inner flat ceiling and an outer sloped roof. The reason for this is found in the construction of the arch. Where the arch springs from the pillar the stones which compose it are horizontal, but at the top of the arch they are vertical, and thus if they were not protected in some way the cement would be washed out and the arch destroyed. The superstructure of a church or cathedral is governed by the ground plan. Views were here shown of the plan and external appearance of Lincoln Cathedral and an explanation given of its construction. It is seen to consist of two parts, the nave and the transept crossing each other at right angles. It was always this point of juncture that the builders considered the most important, and they showed this, by erecting a tower on which they always lavished a great deal of care and skill. The nave is always divided into two parts, the nave proper, and the choir. It will be seen that the choir in our cathedrals always occupies a great deal of space, very nearly as much as the nave. This is because most of our cathedrals were originally monastic establishments, and the clergy were of as great importance as the congregation. The point the builders considered as only secondary in importance was the western front. This is nearly always adorned by two great towers, one on each side of the entrance, and occupying the width of the aisles. Now, whereas these towers are built directly on the ground, the tower in the centre is not so built, but is carried on four great piers, which uniting in the form of arches, one on each face of the tower, carry its weight. We here see the difficulties the builders had to contend with

in erecting a tower at this point. Part of the weight of this tower is very often carried by flying buttresses, which, though adding to the beauty of the design, were not originally intended for that purpose. In some instances the central tower gave way, as at Chester about twenty years ago, or has been left unfinished owing to the weakness of the foundations, as at Westminster Abbey, where it is only carried just beyond the roof. Lichfield is the only example in which the three towers are completed as they were intended to be. The square towers are finished off with beautiful spires. Having described the general construction of a Gothic church, the lecturer turned his attention to the minuter details of the interior. The construction consists of a succession of bays, carried from the floor up to the roof, the space between two pillars being called a bay. In the triforium there are two sub-arches in each bay, and the part just above these arches is occupied by a flat face of stone. It is very interesting to notice the gradual development of ornamentation on this surface. At first the builders left it plain, then they advanced to a lozenge-shaped pattern or simple designs. This was followed by piercing the surface with holes, the outcome being those beautiful results we see in the work of the next century. The first instance of the piercing of this space occurs in Peterborough Cathedral, and there is only one section so treated. The gradual growth of the capital was shown in the same manner, from the stage at which it merely served to mark the point from which the arch sprang to the time when it was finished off with elaborate carving. Norman churches always have a very substantial appearance, but it is a curious fact that the stones of which they are built are small. This is no doubt owing to their not cutting larger stones than a man could carry on his back. The lecture was illustrated by a number of beautiful photographs of many of the English cathedrals, which were shown on two screens, thus facilitating a comparison of different styles.

SOCIETY MEETINGS.

Leeds and Yorkshire Architectural Society.—Mr. J. T. Micklethwaite, F.S.A., delivered an interesting lecture to the members of the Leeds and Yorkshire Architectural Society, in their room, at the Mechanics' Institute, on "The Story of the Building of Westminster Abbey Church." Mr. E. T. Dodgshun (the president), in introducing Mr. Micklethwaite, said he was very well known in Leeds because of his connection with Kirkstall Abbey.—Mr. Micklethwaite remarked that when we had the story of the development of one of our great churches, it threw a great deal of light on other churches. These churches, as we saw them, were not deliberately designed structures, but grew naturally, like a tree out of the ground. Some of our older abbeys, like Ripon and York, go right back to the seventh century, and gradually grew and became the great churches that we saw now, and he wished to show them how that happened at Westminster Abbey. Westminster Abbey was a national monument. It only became that by accident. It happened to be next to the residence of the King, and became the place of the coronation of the Kings, and from the time of Henry III. onwards it was recognised as their place of burial. In the seventeenth century it began to be thought that burial in Westminster Abbey was the greatest honour that could be conferred upon a man after his death. That feeling grew up during the Commonwealth, and all the great men of the Commonwealth were buried there. The first Abbey was erected in the seventh century, but Bede, the great historian of the English Church at the time, did not mention it, though he mentioned York and Ripon, and we might take his silence as proof that in his time Westminster Abbey did not exist. In the eleventh century we get the fact that Edward the Confessor wished to build an Abbey close to his

house at Westminster, and there was an old Abbey there. We were not told how old it was, but he set to work to rebuild it. The lecturer then traced the progress of the Abbey buildings, illustrating his remarks by references to plans, and showing how they continued to grow until the sixteenth century, every step being a definite step in the history of the Abbey.—At the close of the lecture questions were invited, and a vote of thanks to the lecturer concluded the proceedings.

Society of Engineers.—At the meeting of this society, which was held at the Westminster Palace Hotel, on Monday, March 4th, a paper was read on "Parliamentary Procedure as affecting Light Railways and Tramways," by Messrs. W. Worby Beaumont and Stephen Sellon, of which the following is a synopsis: Engineering enterprise restricted by present parliamentary methods—Costs under present system—Harmful and costly delays caused by it—Public advantage endangered by opposition in the stages as at present conducted—Proposition and proof of public interest and utility should be heard first, opposition afterwards—Agreements made before date of standing orders should pass standing orders—Agreement before standing orders an absurdity with prayer form of petition—Abandonment of important schemes in consequence—Public loss and enhanced cost of transit—Clauses inserted at instigation of opposition without investigation by committee—Joint Committee, but independent decisions—Board of Trade and wider powers—Parliament to consider relation between proposed capital and reasonable cost—Restricted debentures no protection—Comparison of fares and rates with costs of promotion—Estimates—Light railways required in numerous districts—Extensive systems of light railways not asked for—Tramroads more important in most districts—Tramways wanted in many districts and all impossible under present procedure and restrictions—The Board of Trade Committee on Light Railways and its report.

York Architectural Society.—Mr. J. W. Longfield, of the Art Metal Works, Otley, read a paper on Wrought-iron Work at the meeting of this society, held at the Church Institute. Mr. A. Mollard, in the chair. The lecturer stated that no material was more worthy of study than wrought iron, for although it was the cheapest of metals, yet it surpassed all others in interest and in its utility to us. The discovery of immensely rich ores of iron in almost every part of the world, and of fuel fit to reduce them, had already inaugurated a period of decline in the production of iron ore in this country, and should lead us to prepare for the inevitable change from the raw produce mart to the art-produce mart of the world, which must ensue if we were to maintain our trading supremacy in the future. The recent movement in favour of the adoption of wrought-iron work for architectural and domestic purposes in preference to the hard geometric productions of the foundry had caused one to wonder why this beautiful art had become superseded by cast-iron. He was afraid that cheapness, as in a great many other things, was responsible for it. A peep inside our old cathedrals, such as York Minster, amply demonstrated the love of our forefathers for the beautiful examples of the smith's art which were now coming to the front again. If forges superintended by experienced smiths could be erected in our technical schools, he was sure that many young men would learn the craft, and not only improve their means, but produce a supply of mechanics which was really becoming needed. In accuracy and finish the English workman was all that could be desired, but when they looked for taste, idea or originality, he was most disappointing. Furthermore, it was often next to an impossibility for a smith to execute the designs of many architects except at a great cost, whereas a similar effect might easily be obtained if the architect had a slight knowledge of the material in which the design had to be made. In conclusion, Mr. Longfield urged that if architects and those engaged in the building trades were to apply themselves more fully to the study of the craft, wrought-iron work as an art would make greater strides in the future than it had ever done in the past.

The Carlisle Architectural Engineering and Surveying Society.—Mr. W. Pogson, read a paper on "Iron Roofs," at the meeting of this society held on the 21st ulto. The lecturer dealt at some length upon the advantages of iron over other materials for roofing purposes, on account of its strength, relative weight and durability. He also went into the question of live and dead loads, and stated that, in his opinion, an allowance of from 40 lbs. to 50 lbs. live load per square foot for wind pressure, was sufficient in Great Britain. A number of diagrams were introduced.

Glasgow Institute of Architects.—The Council of this Institute held a special meeting in the chambers of Messrs. MacLean, Fyfe and MacLean, on the 25th ulto. The President occupied the chair, and the Secretary read letters from Sir Frederick Leighton, P.R.A., Mr. R. Norman Shaw, R.A., Sir George Reid, P.R.S.A., and other gentlemen, notifying their acceptance of the honorary membership which the Institute had conferred upon them.

JEAN FRANCOIS MILLET.

The Peasant Painter of Barbizon.

By ARTHUR O'NEILL.

Continued from page 44.

THE Salon is everything to the ordinary French Artist, although he may affect to despise or disdain it. Millet obeyed the instincts of the mass of his brotherhood. He sends to the Salon, although to him it is a torture chamber. He finds himself torn between the indifference or stupid surprise of the public, and the fury or the sympathy of the people who pretend to criticise his masterful works. In the fulness of his magnificent nature he has little sympathy with the official exhibition, and yet he uses it. It was a mockery, if you like; but it meant bacon and beans to the increasing family at Barbizon. As he acknowledged, in a pitiful letter, he found his pictures out of their element, and lost in a world which did not speak the same language. The new painting only raised a feeling of curiosity in him, and he said to a friend, "I wish I could make Artists paint with more meditation, and critics write with less sufficiency. I would like the Salon closed for five years, and at the end of that time each Artist be allowed only to send one nude figure, which would have no meaning. You would then see how many clever fellows would withdraw from competitions, and how much want of knowledge is our modern disease."

We revert now to 1862, the year in which the master felt himself ripe for his boldest ventures. After having proceeded with a certain amount of caution hitherto, he then showed to the world a mass of invention, a series of unexpected works in a form that no Artist before him had used. In this year 1862 he painted "Winter" and "The Crows," "Sheep-feeding," "The Woolcarder," "The Stag," "The Birth of the Calf," "The Shepherdess," and the "Man Resting on the Hoe," which raised such a hue and cry with nervous critics. If the series of works made during this important year were brought together, it would be said that their author must have elaborated them in the most quiet spirit. They all are the wholesome, robust offspring of Millet's genius, despite his sad and, one might say, overwhelming troubles.

Not yet had peace come for him. He was destined never to have rest except in that "place of refreshment" which he foresaw as the end of all his struggles. How could he find rest for a mind which was charged with the making of a revelation to a new generation? Here was the distressing crowd of creditors, pestering him, as they had pestered his friend Rousseau. No man, of course, ought to have creditors. That is a good old aphorism of prudential philosophy. It is an axiom which genius forgets to put into practice; it involves a problem which neither a fitful nor a purposeful genius can readily set himself to solve. Lonely, but anything rather than lifeless, he clambered along the steps of the endless ladder and wrought his life-work, unabashed by the

tribulations which came to him, and bearing upon his honest soul the consciousness that the power in him would survive him, and that a world to come would class him higher than his contemporaries would value his name as one of fame, and busy themselves in the time to follow, by exalting him as famous above his best renowned compeers. And the Artist, it is said, does not appreciate his critics. Do not ask me to believe such heresy. Is it possible that among my hearers there are some who are familiar with Mr. R. H. Horne's "Orion," an instructive parable on "A Single Object and a Hundred Eyesights." It is the solvent of manifold mysteries, and the key to all artistic criticism. You must try to see with the Artist's eye, before you dare to profane with random words the Artist's bright productions. It is true, perhaps, that one needs to be something of an Artist himself to be sufficiently susceptible to the beauty of an artists' handicraft. Even in the midst of his torments and his efforts, Millet found a sympathetic critic in Monsieur Pelloquet, to whom he made the gracious response, which at once discloses his opinions on Art and the virility of his mind. "Monsieur," he writes from Barbizon, "I am very much pleased at the manner in which you speak of my pictures at the Exhibition. The pleasure is especially great because of your manner of speaking of Art in general. You belong to the very small number of persons who believe (also for those who do not believe it) that an art is a language, and that a language is made to express thoughts. Say it, and say it over again! Perhaps it will make some one reflect. If more people believed it, we would not see so much aimless writing and painting. It is called skilful, and those who make a business of it are greatly praised. But truly, and if, in fact, it is real skill, should it not be employed only to accomplish good work, and then hide itself modestly behind the work? It would be very absurd if the wrist took precedence of the brain. I do not remember, word for word, what Poussin says in one of his letters about the trembling of his hand, at a time when his head was in good working order, but this is about the gist of it. And, although it (the hand) is weak, yet it must still be the servant of the greater power. Once more, if more people believed as you do, they would not so resolutely devote themselves to flattering bad-taste and evil passions for their own profit and without care for right; as Montaigne says so well, instead of naturalising art they artificialise nature."

"I will tell you some things which are to me matters of faith, and which I would like to express in my work. That things should not look as if they were brought together by accident and for the moment, but that they should have among each other an innate and necessary connection. I want the people I paint to look as if they were dedicated to their situation—that it would be impossible for them to ever think of being anything but what they are. A work should be all of a piece, and people and things should be there for an end. I wish to put strongly and fully all that is necessary, so much so that I think things weakly said had better not be said at all, because they are, in a manner, deflowered and spoiled; but I profess the greatest honour of uselessness (however brilliant) and filling up. Such things can have no result but to take off the attention and weaken the whole."

"It is not so much the objects represented as the desire of the artist to represent them, and this desire creates the degree of power with which he has executed his work. One can say that everything is beautiful in its own time and place; and, on the other hand, that nothing is beautiful which comes at the wrong time."

"Let us have no weakening of character; let Apollo be Apollo, and Socrates be Socrates. Do not combine the two—they would both lose by it. Which is the handsomer, a straight tree or a crooked tree? The one that is in its place. I therefore conclude that the beautiful is the suitable."

"This might be infinitely developed and proved by endless examples. Understand that I do not speak of absolute beauty, for I do not know what it is, and it seems to me only a tremendous joke. I think people who think and talk about it do so because they have no eyes for natural objects; they are stultified in 'finished art,'

and think nature not rich enough to furnish all needs. Good people they poetize instead of being poets. Characterize! that is the object. Vasari says that Baccio Blandinelli made a figure to represent Eve, but getting further in his work, he found that his figure was a little thin in the flank for an Eve. He simply gave her the attributes of Ceres, and the Eve became a Ceres. We may admit that, as Blandinelli was a clever man, there must have been some bits of superb modelling in the figure, and great knowledge, but nevertheless it had no determined character and was a most miserable work. It was neither fish nor flesh."

To be Concluded.

PROFESSIONAL DIGNITY.

WE return to our charge; we accuse the Editor of our Catherine Street contemporary of a flagrant disregard of good manners; we are convinced—on his own showing—he knows little of journalistic etiquette. We have no objection to a legitimate sling and stone, but we detest mud. We are not going to throw mud, but we have no objection to a fair and honest volley in decent warfare. It shall be a volley all round. We applied to the Editor of our contemporary—he posing not as Editor but in professional capacity, and under his own name, as an authority on a particular branch of architecture—for the pleasure of his paper. Our letter was couched civilly enough; we wrote as we should have written to the ablest member of the architectural body. We are not likely to minimise the importance of his remarks. There is no need. This lecturer's worst enemy is himself. We received in reply, a letter almost incoherent in its abuse and impertinent in its refusal. We were threatened with an injunction. Forsooth, the matter might have been of moment yet Architecture would not languish if this authority for ever held his tongue. But we respected our contemporary's Editor—with difficulty. We did not publish his paper. Architecture has survived. But, as if this Tartar rudeness were not enough, our opponent reveals his batteries and lays bare a jealous hatred of ourselves. We are sorry, but this man's hatred need not disturb Olympus. In the columns of our contemporary, there has been made a charge which we deny. Our opponent accused us of pilfering his editorial columns. It is absolutely and entirely untrue. We assure him, in the best of good-humour, that we find him too dull. What we *did* do was to "lift" a portion of Professor Aitchison's lecture to the students of the Royal Academy, and a *resumé* of the papers read at the Institute. The moment we were made aware that our contemporary had monopolized Professor Aitchison—though we hold such monopoly wrong in the true interests of Architecture, and hope soon to be able to destroy it—we expressed our regret. We are of opinion still that the Professor's able papers should be free to all. The *resumé* of the Institute proceedings was journalistically "liftable" matter. In the same sense our contemporary "lifts" reports of architectural meetings in the provinces, an instance of which occurs in its current issue. Our contemporary's conscience is as dull as its pages. If we have brightened either we are satisfied.

MR. FENWICK, as arbitrator, has awarded a Mr. Miles £10,244 for land taken under compulsory powers by the Great Western Railway Company for the extension of their Avonmouth Docks. The expert valuations handed in on behalf of the claimant were about £18,000, while those for the Railway Company ranged from £6,000 to £8,000.

THE Sheffield School Board proposes to erect a new school for the deaf and dumb.

ARCHITECTURAL IRONWORK: CONSTRUCTIVE AND DECORATIVE.

A Series of Instructive Papers for the
Artist and Worker.

CHAPTER II. COLUMNS.

THE vertical or perpendicular constructive iron members employed in architecture are columns or pillars, and stanchions or storey posts. The former are generally of circular section of considerable area, and are usually employed in ground



Figure 1

floors, one of the best for use being shown at Figure 1. This description of stanchion is likewise frequently employed in lieu of cast-iron columns, as the flanges which divide it lengthwise into three equal parts, have been found to add considerably to the strength of the casting, in resisting the tendency to produce deflection from the vertical position. It has been proved that, while cast-iron pillars are best when the length does not exceed twenty-six times its diameter, wrought-iron columns or stanchions are better for any exceeding that length. For pillars with hinged ends, about thirteen times is the limit, these results being roughly approximate only. In order to stiffen wrought-iron struts they are made of various forms in cross section, such as single iron, T iron, double T iron, channel iron, &c. The cross is a very convenient form, as in cast-iron girders and other portions of structural iron-work, it is generally built by rivetting bars of simple forms together. Thus it may be made of T irons rivetted back to back, or four angle irons similarly rivetted, or by one flat bar, two narrower flat bars, and four angle irons, all rivetted together, as shown at Figure 2. The stiffest form for a wrought-iron strut, is that of a cell or built tube, which may be cylindrical, rectangular, or triangular. Cast-iron, from its great resistance to crushing, is particularly well suited for struts, especially if of a moderate length, the best form being that of a hollow cylinder, wherein the thickness of metal is not less than one-twelfth that of the diameter.



Figure 2.

Formerly, stanchions in storey posts were used like their predecessor, the wooden puncheon, in upper storeys of edifices, although now very frequently substituted for columns in lower ones. Both columns and stanchions are constructed of cast-iron, for it



Figure 3.

does not appear that any attempt has been made in Europe to forge pillars of considerable dimensions and great weight like the Lhât of Delhi. Not being subjected to any severe tensile strain, but merely to a crushing stress acting in the direction of the column's length, cast metal is really the best for these members as given an equal quantity of metal, a round column, cast hollow, is far stronger than one cast solid, the best form being to make the inner diameter five-eighths of the size of the exterior diameter. The ring thus formed of the section of the column increases in strength according to the thinness, but

the size of it must be kept within practical limits. If in casting a hollow column, the core is driven to one side, the column, of course, cannot be loaded to its full resistance; it will not carry more than the thinnest part if it is strong enough to bear.



Figure 4

Hollow columns, therefore, require particular care in casting. Columns are cast either in what is technically called green sand (or selected sand, somewhat moistened), or loam. For this purpose it is necessary that the iron founder prepares a wooden model (a pattern, as it is technically termed), exactly resembling the column which he desires to produce in iron. This is then embedded in the strata of sand or loam, held in a couple of iron frames, called "flasks" or boxes. The wooden pattern is then taken out, leaving a vacancy exactly like itself in the sand. Of course, when the molten iron is poured into this mould, it assumes the form of the cavity, and when the casting is cool and taken out, it is an iron column, which is a *fac simile* of the wooden pattern. When the column is to be cast hollow, which is often the case, especially with large work, the mould requires to be, what is technically termed cored, that is to say, a small roll or cylinder of sand or loam is placed along the vacancy in the mould, so that the molten iron flows all around it. When this sand "core" is afterwards cleaned out of the interior of the casting, of course it leaves the column hollow. Columns are usually cast quite plain, sometimes all the same size throughout their length, and sometimes with a slight taper or diminution towards the upper end. When the column will be *in situ* and seen, and it is desired to impart somewhat of a decorative appearance to it, it is frequently "fluted" or grooved with channels in the direction of its length, and has a more or less ornamental capital, instead of a plain cap. This involves more trouble in the production in the foundry. The surface in the pattern has also to be fluted, and in order to ensure the mould being perfect, "false cores" have to be placed at the flutes which come where the parting of the mould is. A, in Figure 3, is the upper flask or box, with its contained stratum or layer of sand, seen in section; B is the lower box and its contained sand; C is the parting or line where the two strata of sand come into contact; D is the column; and EE are the false cores. Various other ornamental designs are used for special situations, as, for example, to support the roofs of platforms of railway stations. It may here be mentioned that it is believed fluted columns owe their origin to the fact that the flutes were cut to enable the Roman soldiery to rest their spears outside while they went inside their temples to worship.



A



B

Figure 6.

The cores of hollow columns have to be made in one piece in length, the castings

made of a uniform thickness of metal, straight, and reasonably perfect, the ends being turned off true in a lathe. The somewhat common practice of casting columns with a greater thickness at the end, where it is observable, than at any other part, should be discontinued. The risk that is thereby assumed is greater to the founder than the value of the metal saved warrants, especially in these days of cheap iron and steel. It is usual, as I have remarked, to make round columns a little smaller at the upper end than at the middle, as this is considered advantageous in stability, as well as improving the appearance. The difference, however, should not exceed one-tenth of the diameter. More rarely, a slight taper is given from the base to the cap, as in stone columns in masonry. For columns, good strong iron or mild steel should be used, and care taken in the founding. It is seldom that columns are cast perfectly straight, the cooling and contraction being unequal; but a minute deflection does not matter, though any fundamentally defective columns should not be used. Of late years steel has taken the place of iron in all constructive elements, nearly every section of beams, pillars, stanchions or joists being now made in steel, including cylindrical and octangular columns, steel being the more useful when weight and bulk are a consideration, to be deposited in turn, in all probability, by aluminium in the not very distant future. Mild steel is generally used, this containing 0.18 per cent. of carbon, and bearing a tensile stress of from 30 to 35 tons per square inch with the fibre, and from 28 to 30 tons across the fibre, much higher results being obtained for special purposes.

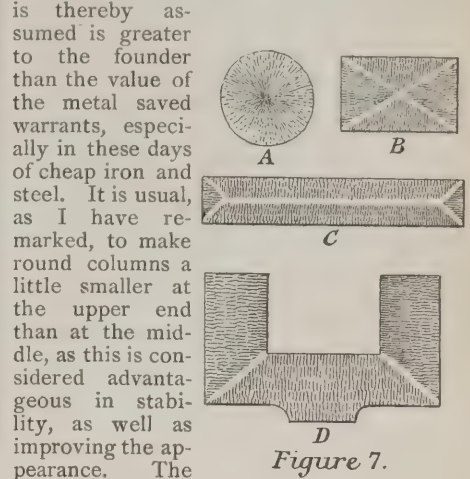


Figure 7.

With regard to the load which hollow cylindrical columns will sustain with safety, the following table, by Mr. W. J. Fryer, jun., will be found useful. A safe load may be estimated at one-fifth the breaking weight. The following table therefore gives the safe load in tons. The columns are supposed to be turned off true at right angles to their axis in the lathe; level caps and base plates used, and the columns set up with reasonable care in the building. For columns not turned, one-half these amounts should be taken for a safe load. In estimating the load to be borne by a column, allowance must be made for any use the building may be put to, and the greatest weight that may come on any one column. Besides an allowance for the floors and the weight to be placed thereon, one-fourth of the total should be allowed in addition, to make assurance doubly sure. Great allowance must be made for columns that are subject to any vibrations caused by machinery, especially machinery in intermittent action, such as drilling and stamping machines, cutting machines used in printing offices, and heavy machinery which is not equally disposed on its base; by railway trains, or under the floors of drill rooms or assembly halls, or when subject to concussion from bodies falling on a floor above, or

made of a uniform thickness of metal, straight, and reasonably perfect, the ends being turned off true in a lathe. The somewhat common practice of casting columns with a greater thickness at the end, where it is observable, than at any other part, should be discontinued. The risk that is thereby assumed is greater to the founder than the value of the metal saved warrants, especially in these days of cheap iron and steel. It is usual, as I have remarked, to make round columns a little smaller at the upper end than at the middle, as this is considered advantageous in stability, as well as improving the appearance. The difference, however, should not exceed one-tenth of the diameter. More rarely, a slight taper is given from the base to the cap, as in stone columns in masonry. For columns, good strong iron or mild steel should be used, and care taken in the founding. It is seldom that columns are cast perfectly straight, the cooling and contraction being unequal; but a minute deflection does not matter, though any fundamentally defective columns should not be used. Of late years steel has taken the place of iron in all constructive elements, nearly every section of beams, pillars, stanchions or joists being now made in steel, including cylindrical and octangular columns, steel being the more useful when weight and bulk are a consideration, to be deposited in turn, in all probability, by aluminium in the not very distant future. Mild steel is generally used, this containing 0.18 per cent. of carbon, and bearing a tensile stress of from 30 to 35 tons per square inch with the fibre, and from 28 to 30 tons across the fibre, much higher results being obtained for special purposes.

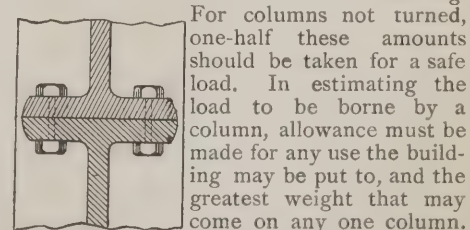


Figure 8.

With regard to the load which hollow cylindrical columns will sustain with safety, the following table, by Mr. W. J. Fryer, jun., will be found useful. A safe load may be estimated at one-fifth the breaking weight. The following table therefore gives the safe load in tons. The columns are supposed to be turned off true at right angles to their axis in the lathe; level caps and base plates used, and the columns set up with reasonable care in the building. For columns not turned, one-half these amounts should be taken for a safe load. In estimating the load to be borne by a column, allowance must be made for any use the building may be put to, and the greatest weight that may come on any one column. Besides an allowance for the floors and the weight to be placed thereon, one-fourth of the total should be allowed in addition, to make assurance doubly sure. Great allowance must be made for columns that are subject to any vibrations caused by machinery, especially machinery in intermittent action, such as drilling and stamping machines, cutting machines used in printing offices, and heavy machinery which is not equally disposed on its base; by railway trains, or under the floors of drill rooms or assembly halls, or when subject to concussion from bodies falling on a floor above, or

liable to lateral blows from goods in transmission colliding with them. Appended is the table referred to:—

SAFE LOADS, IN TONS, FOR CAST IRON COLUMNS.

Length in Feet.	Outside Diameter, 3 in.			Outside Diameter, 4 in.			Outside Diameter, 5 in.			Outside Diameter, 7 in.			Outside Diameter, 9 in.		
	Thickness in inches.			Thickness in inches.			Thickness in inches.			Thickness in inches.			Thickness in inches.		
	1	1 1/2	2	1	1 1/2	2	1	1 1/2	2	1	1 1/2	2	1	1 1/2	2
7	12.8	15.9	17.2	24.9	32.9	38.3	41.7	39.5	53.8	65.0	73.3	102.4	128.7	150.7	169.4
8	19.0	23.0	24.0	21.7	28.4	33.0	35.8	35.1	47.6	57.3	64.4	93.6	117.0	136.9	153.5
9	25.2	30.0	31.0	27.4	34.0	39.0	41.0	38.3	50.0	60.0	67.0	100.0	125.0	145.0	162.0
10	31.5	37.0	38.0	33.0	40.0	45.0	47.0	43.0	55.0	65.0	72.0	105.0	130.0	150.0	167.0
11	37.8	44.0	45.0	38.0	46.0	51.0	53.0	48.0	60.0	70.0	77.0	110.0	135.0	155.0	172.0
12	44.1	51.0	52.0	44.0	52.0	57.0	59.0	54.0	66.0	76.0	83.0	115.0	140.0	160.0	177.0
13	50.4	58.0	59.0	50.0	58.0	63.0	65.0	60.0	72.0	82.0	89.0	120.0	145.0	165.0	182.0
14	56.7	64.0	65.0	56.0	64.0	69.0	71.0	66.0	78.0	88.0	95.0	125.0	150.0	170.0	187.0
15	63.0	71.0	72.0	62.0	70.0	75.0	77.0	72.0	84.0	94.0	101.0	130.0	155.0	175.0	192.0
16	69.3	77.0	78.0	68.0	76.0	81.0	83.0	78.0	90.0	100.0	107.0	135.0	160.0	180.0	197.0
17	75.6	83.0	84.0	74.0	82.0	87.0	89.0	84.0	96.0	106.0	113.0	140.0	165.0	185.0	202.0
18	81.9	89.0	90.0	80.0	88.0	93.0	95.0	90.0	102.0	112.0	119.0	145.0	170.0	190.0	207.0
19	88.2	96.0	97.0	86.0	94.0	99.0	101.0	96.0	108.0	118.0	125.0	150.0	175.0	195.0	212.0
20	94.5	102.0	103.0	92.0	100.0	105.0	107.0	102.0	114.0	124.0	131.0	155.0	180.0	200.0	217.0
21	100.8	108.0	109.0	98.0	106.0	111.0	113.0	108.0	120.0	130.0	137.0	160.0	185.0	205.0	222.0
22	107.1	115.0	116.0	104.0	112.0	117.0	119.0	114.0	126.0	136.0	143.0	165.0	190.0	210.0	227.0
23	113.4	121.0	122.0	110.0	118.0	123.0	125.0	120.0	132.0	142.0	149.0	170.0	195.0	215.0	232.0
24	119.7	127.0	128.0	116.0	124.0	129.0	131.0	126.0	138.0	148.0	155.0	175.0	200.0	220.0	237.0
25	126.0	133.0	134.0	122.0	130.0	135.0	137.0	132.0	144.0	154.0	161.0	180.0	205.0	225.0	242.0

STATISTICS from Birmingham strikingly indicate the cost entailed by the severe frost there. It is estimated that out-door workers lost £50,000 in wages, and that £10,000 was spent in relief. Two thousand water-pipes burst, entailing, with fractures of gas-pipes, a cost of £1,000 every day. The water department sent round water carts at a cost of £100.

THE Urban District Council of Bishop Stortford has received the formal sanction of the Local Government Board for the raising of a loan of £3,142 for extensions at the water-works. The Council have considered Mr. Mansergh's report on the sewage, which stated that the Council must double its pumping powers at a capital outlay of £2,000. The subject was adjourned for Mr. Ingold and the Surveyor to bring it forward in a more complete form.

THE *Aluminium World* gives a table showing the quantity, price, and total value of manufactured aluminium for each year from 1884 to 1893. It is as follows as regards quantity turned out. In 1884 there were only 150 lb., in 1885 there were 283 lb., in 1886 there was a leap to 3,000 lb. During these three years the price remained steady. In 1887 it dropped to about a third, and the output increased to 18,000 lb. In 1888 it was 19,000 lb., and in 1889, when there was another fall in price, the quantity manufactured had risen to 47,468 lb. In 1890 it was 61,281 lb., and in 1891, with a further considerable reduction in price, the output mounted to 150,000 lb. In 1892 it was 259,885 lb., which had risen to 339,629 lb. in 1893.

MR. WALTER SCOTT, of Newcastle, has purchased a portion of the Whitley Park Estate, and plans for the formation of several new streets have been prepared by Mr. Wm. Glover, architect, 16, Market Street, Newcastle, and have been approved and passed by the local authority. The plans provide for 154 houses.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

To the Editor of "THE BUILDERS' JOURNAL."
"PIERLESS' BRIDGES."

13, Southampton Street, Strand,
March 4th.

SIR,—In asking you to permit me to congratulate you upon the excellence of your literary matter—its sprightliness, its usefulness, and upon the general beauty of your illustrations, may I add that there is one weakness which I have detected in your work, and that is, you are deficient in a due and proper sense of *proportion*. For example, a Fellow of the Royal Institute of British Architects who has hitherto withstood the temptation to favour the World with a few triumphs of Architectural Art, and who has, at No. 9, Conduit Street, put Phidias right upon a little question connected with the sculpture of the Parthenon, selects for a paper to be read before the Architectural Association the all-absorbing subject of Bridges—structures which are solely and purely the work of the Architect; upon which almost every practising Architect is at this moment engaged, hundreds of bridges being thrown across the Thames every year!

You, Sir, and your professional contemporaries, are invited to sit and listen, and what do you all do? You stay away, and do not even reproduce the paper which you could have had for the asking, and for which your subscribers were clamouring. Not that the writer of the paper cares—he is very glad you did not go—he says so himself, in one of those little paragraphs so dear to him—in fact, he would not have known you were absent only some one told him, and he certainly will not invite you again—so there!

The next time the Editor in question becomes a lecturer, please attend in your official robes, and let us have no more of these conspiracies to keep from an anxious World reports of papers of so momentous a character as that on "Bridges," by a writer who has never built one.—I am, Sir, yours faithfully,

WM. WOODWARD.

[Mr. Woodward is in satirical mood. We have tempered his sentences with a little editorial milk and mercy. Bridges have their uses, and so, too, have lecturers. We are always glad to do justice to the authority in question. We might just point out that we were frankly and fairly wishful to publish the paper on "Bridges." We applied for it. We were met by gruffness, some interjections, and a little joke above an injunction. Still our ardour is undaunted, and we may even bridge over this difficulty. We shall always report the editor of our fourpenny contemporary, when we think his remarks sufficiently grotesque or—important. We will even quote the paper: *The Builder*. There! The heavens are not fallen and the Law Courts are undisturbed.—ED. BUILDERS' JOURNAL.]

THE vicar and churchwardens of Oldham have started a scheme for the restoration of the parish church. The present building, replacing one which was restored in the fifteenth century, was built by special Act of Parliament in 1830, to seat 1,700. It is proposed to raise £1,200 for partial reseating, the rehanging of the peal of bells, and renewal of organ, which is literally falling to pieces in its case. The whole scheme will require, in addition, £3,000 for chancel and £1,500 for chapel and vestries, in order to complete the church as designed in the original plans of Sir Charles Barry.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

CURRENT PRICES.

TIMBER.			
KHB	4 x 11 Yellow	per Standard	£18 0 0
DM	4 x 11 "	"	10 15 0
HAB	4 x 9 "	"	13 10 0
KHB	3 x 11 "	"	18 0 0
EF	"	"	"
I	3 x 11 "	"	17 10 0
DM	3 x 11 "	"	8 10 0
HMH	3 x 9 "	"	15 10 0
DDD	3 x 9 "	"	13 5 0
**	3 x 9 "	"	9 0 0
KHB	3 x 9 "	"	4 0 0
U	3 x 7 "	"	12 15 0
RFO	2 1/2 x 7 "	"	6 15 0
OBOLA	2 1/2 x 7 "	"	8 7 6
JAE	2 x 8 "	"	7 0 0
CEPLE	2 x 4 "	"	7 0 0
P	3 x 11 White	"	9 0 0
P	3 x 11 "	"	8 2 6
SVGVIK	1 1/2 x 6 1/2 Yellow	per Square	0 17 0
HBB	1 x 6 "	"	0 14 6
S&W	1 x 7 "	"	0 9 0
Sequoia, 3" & 4" x 14/20"	per foot cube	0 2 0	
Pitch Pine, Prime, 3 x 11	per Standard	11 0 0	
"	Choice 1 x 11	"	10 10 0
"	Prime 1 x 6	per Square	0 12 0
"	Fresh Sawm 16/18"	per load	50/-
"	" 13/15"	"	45/-
"	" 11/13"	"	48/-
"	" 9/11"	"	43/-
Honduras Mahogany	per foot super.	3d. to 6d.	
Panama	"	2d. to 5d.	
Tabasco	"	3d. to 5d.	
Mexican	"	2d. to 3d.	
African	"	2d. to 5d.	
Cuba	"	3d. to 9d.	
" Cedar	"	3d. to 5d.	
Mexican	"	3d. to 3d.	
Prime Hewn Oak Logs...	per load	85/-	
Birch Putlogs	per doz.	4/6	
METALS.			
Iron—Cleveland Pig	per ton	34s. 5 1/2d. to 34s. 7 1/2d.	
" Hematite	"	41s. 7d. to 41s. 9d.	
" Scotch Bar	per ton	£5 5s.	
" Best	"	£5 12s. 6d.	
" Extra Best	"	£6 7s. 6d.	
Yellow Metal Sheets	per lb.	4 1/2d. to 4 3/4d.	
Copper—British, Best Selected	per ton	£43 5s. to £43 15s	
Sheets, Strong	per ton	£50	
Australian Fine	per ton	£43 10s. to £44 10s.	
Lead—Pig	"	£9 10s. to £9 11s. 3d.	
" Sheet, English	"	£10 12s. 6d. to £10 15s.	
Tin—English Ingots	per ton	£63 to £63 10s.	
Australian	per ton	£60 7s. 6d. to £60 17s. 6d.	
Straits	"	£60 5s. to £60 15s.	
Banca	"	£61 10s. to £62	
Zinc—Sheet	"	per ton £18 5s.	

NOTICE has been given to propose the appointment of Mr. H. Vater as Surveyor to the Uckfield Board at the next meeting, with a salary of £150 a year.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BOURNEMOUTH.—For erection of a Mission Chapel in Holdenhurst road, Bournemouth, in connection with St. Clement's Church. Messrs. Dancaster and Taylor, architects, Boscombe, Bournemouth:—

	Building.	Boundary wall and Iron Railings, &c.
Walden Bros., Boscombe	£1,247	£156
Davis, Robert, Boscombe	1,125	—
Head and Sons, Boscombe*	1,070	80

* Accepted.

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch PRESSED BRICKS
Cheaper & Better than STOCKS.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

F. GODFREY COLE,
Electric Light Studios,
248, CALEDONIAN ROAD,
LONDON, N.

BRISTOL.—For alterations and enlargement of the Capital and Counties' Bank. Mr. Richard Milverton Drake, architect, Bristol:—

	Bill No. 1.	Bill No. 2.	Bill No. 3.
	Belgian Granite.	Cornish Granite.	Bath Stone.
Bastow, J. ...	£7,043	£6,990	£6,095
Veals, W. ...	7,000	6,970	5,910
Hatherly and Carr	6,697	6,597	5,597
Cowlin, W., and Son	6,673	6,643	5,773
Church, W. ...	6,550	6,473	5,494
Wilkins, R., and Sons	6,549	6,454	5,394
Walters, E. ...	6,300	6,244	5,361
Forse, H. A. ...	6,000	5,885	4,900
Humphreys, G. ...	5,995	5,891	4,856
Rossiter, H. J. ...	5,889	5,752	4,797
Hayes, C. A. ...	5,700	5,515	4,649

* Accepted, exclusive of £1,000 for Fittings and Heating.

LONDON.—For enlarging the Munster road School, Fulham, by 389 places, for re-dividing the boys' and girls' playgrounds, and for other works, for the School Board for London. Mr. T. J. Bailey, Architect:—

		For brickwork in cement, add
Foster and Dicksee ...	£5,335 0 0	£55 0 0
Lathey Bros. ...	5,313 0 0	80 0 0
Yerbury, R. A., and Sons	5,255 0 0	80 0 0
Shillitoe, J., and Son ...	5,150 0 0	80 0 0
Hart Bros. ...	5,053 0 0	61 0 0
King, W., and Sons ...	4,990 0 0	90 0 0
Pattinson, S. and W. ...	4,970 0 0	102 0 0
Charteris, D. ...	4,909 0 0	64 7 2
Treasure and Son ...	4,907 0 0	73 0 0
Stimpson and Co., 78, Brompton road, S.W.*	4,876 0 0	96 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For the erection of chimney shaft, boiler setting, &c., near Finsbury Park, N. Mr. E. Taylor, engineer:—

Cope, J. ...	£759 0 0
Neil, W. ...	725 0 0
Myles and Warner ...	650 0 0
Yates, J., and Co. ...	602 0 0
Warrington, T. ...	599 0 0
Broadhurst, J. ...	575 0 0
Powell, R. ...	545 5 0
Kenney, O. H. ...	497 0 0
Wilkinson Bros., 64, St. Thomas' road, Finsbury Park, N. (accepted)	474 0 0

LONDON.—For the erection of a school on the Page's Walk site, Bermondsey, to provide accommodation for 1,174 children, which will include a house for the schoolkeeper, with a laundry centre underneath, and a manual training centre (to be erected on arches), &c., for the School Board for London. Mr. T. J. Bailey, Architect:—

		For Brickwork in cement, add
Hart Bros. ...	£22,300 0 0	£398 0 0
King, W., and Son ...	20,783 0 0	319 0 0
Boyce, T. ...	20,133 0 0	375 0 0
Holliday and Greenwood ...	20,123 0 0	410 0 0
Lathey Bros. ...	19,924 0 0	319 0 0
Grover and Son ...	19,766 0 0	386 0 0
Holloway Bros. ...	19,643 0 0	386 0 0
Marland, J. ...	19,373 0 0	398 0 0
Cox, C. ...	19,260 0 0	358 0 0
Downs, W. ...	19,251 0 0	345 0 0
Treasure and Son ...	19,049 0 0	360 0 0
Lawrence and Sons ...	18,987 0 0	358 0 0
Wallis, G. E., and Sons	18,686 0 0	300 0 0
Collinson, J. F., Teddington*	18,453 11 5	318 4 3

* Recommended for acceptance by the Works Committee.

LONDON.—For the enlargement of the Church-street School, Stoke Newington, by 200 places, for the School Board for London. Mr. T. J. Bailey, Architect:—

		For brickwork in cement, add
Killby and Gayford ...	£2,241 0 0	£44 0 0
Lidstone, N. ...	2,178 0 0	39 0 0
Cox, C. ...	2,146 0 0	39 0 0
Willmott and Sons ...	2,146 0 0	50 0 0
McCormick and Sons	2,074 0 0	36 0 0
Grover and Son ...	1,999 0 0	43 0 0
Dabba, W. M., Stamford-hill, N.*	1,931 0 0	43 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For the provision of manual training and laundry centres in connection with the Marlborough-road School, Chelsea, and for other work, for the School Board for London. Mr. T. J. Bailey, Architect:—

		For brickwork in cement, add
Yerbury, R. A., and Sons	£3,865 0 0	£135 0 0
Gaze, W. H. ...	3,838 0 0	93 0 0
Holloway Bros. ...	3,734 0 0	91 0 0
Hart Bros. ...	3,589 0 0	76 0 0
Lathey Bros. ...	3,587 0 0	90 0 0
Foster and Dicksee ...	3,381 0 9	66 0 0
Pattinson, S. and W. ...	3,277 0 0	106 0 0
Charteris, D. ...	3,247 0 0	104 0 0
Stimpson and Co. ...	3,187 0 0	100 0 0
Collinson, J. F., Teddington*	3,103 4 6	80 1 10

* Recommended for acceptance by the Works Committee.

LONDON.—For sewerage, levelling, paving, &c., Nightingale-road, for the Hanwell Urban District Council. Mr. S. Barnes, Surveyor, Church-road, Hanwell. Quantities by Mr. E. J. Reynolds, A.M.Inst.C.E.:—

Broderick, J. G. ...	£434 2 4
Killingback and Co. ...	432 5 0
Mowlem, J., and Co. ...	428 14 0
Novell and Robson ...	419 16 7
Macklin, J. ...	393 10 10
Drury, H. ...	384 1 3
Free and Son ...	382 3 6
Adams, T. ...	379 14 8
Wimpey, Geo., and Co. ...	374 7 6
Ball, J. ...	352 2 c
Rhodes, M. N. ...	349 19 6
Lee, H. ...	344 11 9
Pearce, G. ...	340 9 5
Lee, W., and Son ...	318 15 1
Ballard, R., Ltd. (withdrawn)	277 0 0

LONDON.—For providing a complete system of low-pressure hot-water apparatus for warming the Mantle-road School, Brockley, as now being enlarged, for the School Board for London. Mr. T. J. Bailey, Architect:—

Wontner, Smith, Gray & Co. ...	£475 0 0
Clarke, J. F., and Sons ...	470 0 0
Davis, G. ...	470 0 0
Purcell and Nobbs ...	463 0 0
Vaughan and Brown ...	447 0 0
Wenham and Waters, Ltd. ...	417 0 0
Gray, J., Danvers-street, Chelsea*	396 10 0

* Recommended by the Works Committee for acceptance.

MANCHESTER.—For Technical Schools for the City Council:—

Neill, R., and Sons (accepted)	£141,545 0 0
--------------------------------	--------------

MARYLEBONE.—For re-drainage and other sanitary work at the Northern Dispensary, Little Union-place, Lisson-grove, N.W., for the St. Marylebone Guardians. Mr. A. Saxon Snell, Architect:—

Smith, G. ...	£647 0 0
Hatfield and Son ...	433 0 0
Thompson and Beveridge ...	368 0 0
Wall, H., and Co. ...	289 0 0
Buckridge Bros. ...	283 15 0
Killingback, C. W., and Co., Camden Town, N.W. (accepted)	275 0 0

CARLISLE.—New Business Premises, English street, for Mr. W. D. Todd. H. Higginson, architect, Carlisle. Quantities by the architect.

(Accepted Tenders).

Builders' work.—Beatys, Jas. ...	£320 0 0
Joiners' work.—Reed, J. H. ...	380 0 0
Plasterers' work.—Ferguson and Sons ...	97 0 0
Plumbers' work.—Smith, Jos. W. ...	47 4 6
Slaters' work.—Nanson, C. J. ...	43 0 0
Painters' work.—Deuard, Jos. ...	54 9 6

Total £941 14 0

DOWNTON.—For building Board Schools, Board Room, &c., Downton. Messrs. John Harding and Son, architects, Salisbury. Quantities by the architects:—

Matthews, A. J., Salisbury ...	£4,500 0 0
Kellow and Smith, Salisbury ...	4,045 0 0
Harris, G., Salisbury ...	3,985 0 0
Witt, E., Salisbury ...	3,950 0 0
Wort and Way, Salisbury ...	3,909 10 6
Hale, Ed., Salisbury ...	3,900 0 0
Webb and Co., Salisbury ...	3,768 0 0
Cole, W. Q., Amesbury ...	3,749 0 0
Beale, F., Andover ...	3,717 0 0
Bailey, J., Downton*	3,653 7 0
Vincent and Folland, Salisbury ...	3,600 10 0

* Accepted subject to certain variations.

LONDON.—For refitting the teachers' offices in connection with the Goodrich road Schools, East Dulwich, providing a new system of drainage, &c., for the School Board for London. Mr. T. J. Bailey, architect:—

Bowyer, J. and C. ...	£1,793 0 0
Holloway Bros. ...	1,791 0 0
Lathey Bros. ...	1,745 0 0
Holliday and Greenwood ...	1,683 0 0
Whitehead and Co. ...	1,437 0 0
Frampton, J. ...	1,415 0 0
Garratt and Son ...	1,398 0 0
Nightingale, B. E., Albert Works, S.E.*	1,395 0 0

* Accepted by the Works Committee.

INTERNATIONAL BUILDING TRADES EXHIBITION,

THE SECOND OF A SERIES UNDER NEW MANAGEMENT,
WILL BE HELD AT THE
ROYAL AGRICULTURAL HALL, LONDON,
FROM MARCH 25 TO APRIL 4.

The Consultative Council, consisting of gentlemen of high repute in the Professional and Manufacturing World, are taking special interest in this Exhibition, for the purpose of securing the greater development of Trade in connection with the Building Industries.

CONSULTATIVE COUNCIL.

BANISTER FLETCHER, J.P., D.L., F.R.I.B.A., *Chairman.*

J. PARNELL ALLEN, P.A.S.I., Newcastle-on-Tyne.
CHAS. BARRY, F.S.A., F.R.I.B.A.
ERNEST BENEDICT, C.E., (*The Indian Engineer*).
T. BLASHILL, F.R.I.B.A., Architect to the London County Council.
T. CHATFIELD CLARKE, F.R.I.B.A.,
F. R. FARROW, F.R.I.B.A.
LEWIS H. ISAACS, F.R.I.B.A.
CHAS. LYNAM, F.R.I.B.A.
J. DOUGLASS MATHEWS, F.R.I.B.A., F.S.I.
EDMUND A. PONTIFEX, M.Inst.C.E., Master of the Armourers' and Braziers' Company.
JOHN E. SEARS, F.R.I.B.A.

E. J. KIBBLEWHITE, A.S.A. (*Editor of THE BUILDING NEWS*).
GILBERT WOOD, F.R.G.S. (*The Architect*).
JOHN MOLEM BURT (John Molem & Co.), Master of the Loriners' Company.
H. H. BARTLETT (Perry & Co.), Past President Institute of Builders.
T. FREEMAN, F.G.S., F.S.S., Warden Shipwrights' Company.
LAZENBY LIBERTY (Liberty & Co.), Master of Glass Sellers' Company.
THOS. MINTON, J.P. (Mintons, Limited).
H. GREVILLE MONTGOMERY (*The British Clay-worker and Potter*).

PEARSE MORRISON, Master of Blacksmiths' Company.
W. NISBET BLAIR, C.E., Borough Engineer and Surveyor, St. Pancras.
LEWIS ANGELL, C.E., Borough Engineer and Surveyor, West Ham.
ALFRED DARBYSHIRE, F.S.A., F.R.I.B.A., Manchester.
F. BENNETT SMITH, F.R.I.B.A., Manchester.
FREDK. T. PILKINGTON.
LATHAM A. WITTHALL, F.R.I.B.A., F.S.I.
T. LOCKE WORTHINGTON, A.R.I.B.A., Assoc. San. Inst.
T. FREEMAN, Hon. Sec.

Full Particulars on Application to **THE MANAGER, 222, STRAND, LONDON. W.C.**
Telegrams—"BATIMENT, LONDON."

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD. W

NEWPORT.—Additions to Marshes Road School, Newport, for the Newport School Board. Benjn. Lawrence, architect, Newport:—

Webber, Thos.	£3,500	0	0
Parfitt, Dyson	3,398	0	0
Wilkins, Geo.	3,398	0	0
Price, Wm.	3,376	0	0
Jenkins, John	3,345	0	0
Linton, John	3,300	0	0
Diamond, T. G.	3,304	0	0
Jordan, E. C.	3,294	0	0
Morris, J. T.	3,194	0	0
Davies, Jas.	3,180	0	0
Reed, C. H.	3,130	0	0
Westacott, Tom (accepted)	2,965	0	0

NEWPORT.—Additions to Eveswell Schools, Newport, for the Newport School Board. Benjn. Lawrence, architect, Newport:—

Diamond, T. G.	£1,420	0	0
Wilkins, Geo.	1,403	0	0
Jenkins, J.	1,400	0	0
Reed, C. H.	1,368	0	0
Westacott, T.	1,367	0	0
Jordan, E. C.	1,360	0	0
Price, W.	1,342	0	0
Davies, Jas.	1,336	0	0
Parfitt, Dyson	1,295	0	0
Morris, J. T.	1,249	0	0
Linton, J. (accepted)	1,225	0	0

NOTTINGHAM.—For the erection of public baths, Sneyton, for the Corporation. Mr. Arthur Brown, C.E., Borough Engineer, Guildhall, Nottingham:—

Hutchinson, J.	£14,737	14	6
Evans, F.	14,725	10	0
Price, J. F.	14,597	19	6
Dennett and Ingie	14,461	19	6
Barlow, T.	14,453	10	0
Horison, J., and Son	14,427	0	0
Clarke, A. B.	14,216	16	8
Vickers, H.	14,212	0	0
Messom, F. (accepted)	14,000	0	0
Adams, J. J. (informal)	13,875	9	10

[All of Nottingham.]

NOTTINGHAM.—For the erection of public baths, by the side of the River Trent, for the Corporation. Mr. Arthur Brown, C.E., Borough Engineer, Guildhall, Nottingham:—

Keay, E. C. and J., Ltd.	£1,421	12	0
Price, J. F.	1,395	7	0
Attenborough, J.	1,351	19	0
Goddard, Massey and Warner	1,310	7	0
Barry, H. H.	1,264	16	0
Barlow, T.	1,236	0	0
Taylor, J., and Sons	1,230	12	0
Vickers, H.	1,190	0	0
Messom, F.	1,049	0	0
Raynor, W. H., and Son, London road, Nottingham (accepted)	995	0	0
Gell, W., and Son	989	0	0

ESTABLISHED 1866.

J. J. ETRIDGE, Jr. SLATE MERCHANT, SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

PERTH (N.B.).—Accepted for the erection of the Wilson United Presbyterian Church. Mr. J. B. Wilson, architect, 112, Bath street, Glasgow. Quantities by Mr. Campbell, Surveyor, Perth:—

Fraser and Morton, Perth, masonry	£5,009	0	0
Jorgan, Thos., Perth, wright	1,649	0	0
Buchan, Jas., Perth, slating	210	0	0
Frew and Sons, Perth, plumbing	191	17	3
Frew and Sons, Perth, gasfitting	101	10	0
Mackay and Son, Perth, plastering	291	18	1
Stalker and Boyd, Perth, painting	143	0	0
Meikle and Son, Glasgow, glazing	115	0	0

PETERBOROUGH.—For pulling-down and building new house and shop at Gowgate, Peterborough. Mr. J. G. Stallebrass, Architect, North-street, Peterborough:—

Rawe, Peterborough	£700	0	0
Pope, Peterborough	655	0	0
Cracknel, Peterborough	623	0	0
Binder, Peterborough	610	0	0
Gray, Peterborough	570	0	0
Jellings, Peterborough	565	10	0
Bailey, Peterborough	559	0	0
Guttridge, Peterborough	526	0	0
Hicks Bros., Peterborough	509	4	0
Nichols, Peterborough	505	0	0
Bridgefoot, Peterborough	487	0	0
Sibley, Peterborough (accepted)	485	0	0

SALISBURY.—For the erection of school buildings, board-room, &c., Downton, for the School Board. Messrs. John Harding and Son, architects, 51, Canal, Salisbury:—

Matthews, A. J.	£4,500	0	0
Kellow and Smith	4,045	0	0
Harris, G.	3,985	0	0
Witt, E.	3,909	10	6
Wort and Way	3,900	0	0
Hale, Ed.	3,768	0	0
Webb and Co.	3,749	0	0
W. Q. Cole	3,717	0	0
F. Beale	3,653	7	0
J. Bailey, Downton (accepted)	3,600	10	0
Vincent and Folland	3,579	0	0
Jenkins and Sons	3,579	0	0

SHEFFIELD.—For building cottages at Button lane, Sheffield. Plans and quantities by Mr. C. F. Wike, City engineer:—

Holmes, Kirkstall place	£1,687	13	0
Wheen, J., Porter street	1,664	0	0
Duke, A., Ellesmere road	1,634	12	4
Hurst, Norton Woodseats	1,627	18	0
Ashforth, Burngreave street	1,620	0	0
White, Burton road	1,600	0	0
Walker and Slater, Derby	1,555	0	0
Ashton and Biggin, Furnival street	1,533	0	0
May, W., Brighton terrace road	1,496	0	0
Bradbury, Clarence street	1,434	12	7
Morton, J., John street	1,420	14	9
Roper, Ashdell road	1,379	10	0
Eshelby, J., Spring street (accepted)	1,368	5	0
City Engineer's estimate	1,435	0	0



BLACKMAN VENTILATING COMPANY, LTD.,

Engineers and Specialists in
VENTILATING AND WARMING
Public and Industrial Buildings, Schools, &c.
20,000 INSTALLATIONS OF MECHANICAL VENTILATION IN SUCCESSFUL USE.
63, FORE STREET, LONDON, E.C., AND BRANCHES.

DESIGNS, Drawings, Competitions, Perspectives, Tracings, Photographs, Typewriting, Mounting, etc. Quantities, Estimates, Specifications. Finsbury Drawing Office, 113, Pavement, Moorgate, London, E.C. Established 1887.

Paint Mixing.—New Book.—1,000 practical Trade Recipes, Instructions for Mixing and using Paints, Oils, Colours. Illustrated with colours and tools. Free, 2s. J. TOMLIN, Queen's Road, Barnsley, Yorks.

French Polishing, Enamelling, Staining.—New Book. 1,000 practical Trade Recipes, Instructions. Beautifully illustrated. Free, 2s. J. TOMLIN, Queen's Road, Barnsley, Yorks.

Perspectives in Colour, Monochrome, or Pen and Ink.—Address: D. HOME, 45, Church Street, Stoke Newington, N.

Publishing in Parts as Ready.

THE QUANTITY SURVEYOR.

A full exposition in quarto of the most approved modern method, by CHAS. HENRY SEARLE.

Part 6 is now ready. Single Parts, price 1/8 each, forwarded post free by the Author, 16, SOUTHWARK STREET, LONDON, S.E.

APPOINTMENTS VACANT.

CITY OF MANCHESTER.

APPOINTMENT OF DRAINAGE INSPECTOR.
The Paving and Highways Committee are prepared to receive APPLICATIONS for the above position, at a salary of 45s. per week.

Applicants must possess the Certificate of the Sanitary Institute. Applications, accompanied by copies of three recent testimonials (which will not be returned), to be forwarded to T. DE COURCY MEADE, City Surveyor, Town Hall, Manchester, not later than FRIDAY, the 15th MARCH, endorsed on the outside "Application for Drainage Inspector."

Canvassing, directly or indirectly, will disqualify.
Town Hall, WM. HENRY TALBOT,
Manchester, Town Clerk.
February 27th, 1895.

JUNIOR ASSISTANT WANTED in a Borough Engineer's office. Competent to take shorthand notes. Preference will be given to one who has served articles in an engineer's or architect's office. Salary 24s. per week. Copy of testimonial from present employer required, which will not be returned.—Apply, not later than MARCH 11th, to E. BUCKHAM, Town Hall, Ipswich.

SURVEYOR REQUIRES JUNIOR ASSISTANT. Must have been in office of good firm, and write good hand. Full particulars to W. Y. BUILDERS' JOURNAL, Talbot House, Arundel Street, Strand.

ASSISTANT WANTED. Good Draughtsman, well up in all branches. Good references indispensable.—Apply A. Z., BUILDERS' JOURNAL, Talbot House, Arundel Street, Strand.

APPOINTMENTS WANTED.

AN ARCHITECT in the country wishes to RECOMMEND his ASSISTANT (age 22) to an architect in good practice in London. Good draughtsman, excellent traier, and has a general knowledge of practical work.—Address ARCHITECT, West Street, Horsham.

ARCHITECT'S and SURVEYOR'S JUNIOR ASSISTANT DISENGAGED. Over four years' varied experience, including designs, perspectives, details, and specifications. Accurate, neat and quick draughtsman. Salary moderate.—S. W. MEEK, Rosewyn, Truro.

BUILDER'S ASSISTANT (23) seeks RE-ENGAGEMENT in Town. First-class country experience. Practical and theoretical.—Address, W. A. CHAMBERS, 20, Badminton Road, Ashley Road, Bristol.

AN ASSISTANT requires ENGAGEMENT. Seven years' practical experience, good draughtsman, quantities, measuring up, adjusting accounts, &c. Moderate salary.—C. W. G., 135 Preston Road, Brighton.

GENERAL FOREMAN wants ENGAGEMENT. Eighteen years' experience. Thoroughly practical. Just finished large job in City. Good references.—Address, H. H., 70, Biscay Road, Hammer-smith, W.

DRAUGHTSMAN, good all-round man, land surveying, estates, details, perspective. Moderate salary. Excellent references.—B., 23, Eltham Road, S.E.

ARCHITECT'S ASSISTANT (25) desires RE-ENGAGEMENT. Excellent provincial experience, good draughtsman, working drawings, details, specifications. First-class building construction testimonials. Salary, 35s. SIMMONS, Chesterfield Road, Belper.

FURNISH BY GRADUAL PAYMENTS

ON
NORMAN & STACEY'S
LIFE ASSURANCE SYSTEM.

This System enables customers to obtain, by small Monthly Payments, the immediate enjoyment of a well-appointed and artistic home of their own at less cost than renting furnished houses or apartments. By special arrangement with one of the best Life Assurance Companies, the Furniture, in the event of the Customer's death, at once becomes the property of the surviving family without any further payment whatever.

Recognising the demand for a larger and more varied selection than can well be shown at one establishment, Messrs. NORMAN & STACEY now Supplement their own Stock by giving their Customers the additional advantage of selecting their goods from some of the Best Wholesale Houses in each branch of the trade. Every Household Requisite supplied. Goods delivered free in private vans. Terms made to suit the convenience of the Customer.

NORMAN & STACEY, Ld.,
118, QUEEN VICTORIA STREET, E.C.

SELSFIELD QUARRY.

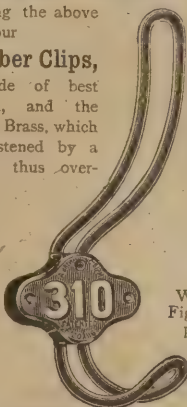
Blocks of this very durable SANDSTONE put on rail at 1s. per foot Cube. Architects should visit this quarry, only 35 miles from London.

ADDRESS:
R. GUNTER, Old House, near East Grinstead.
Nearest Station, Kingscote, L.B. & S.C.R.

The "UNIVERSAL" SCHOOL BOARD HAT AND COAT HOOK.

We are supplying the above with our

Patent Number Clips, which are made of best Malleable Iron, and the Figures of Solid Brass, which are securely fastened by a patent method, thus overcoming the difficulty of painted figures, which soon become discoloured and indiscernible; and the price will compare favourably with any similar article on the market.

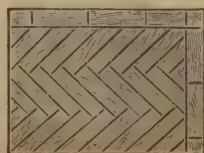


Warranted Steel Wire School Board Hat and Coat Hooks. With Patent Number Clips and Brass Figures, from 1 to 999 inclusive. 5s. per doz.

We supply Painted Figures if required in place of Brass, at 3s. 6d. per dozen. Or Plain Clip only at 2s. 6d. per doz.

Patentees and Makers:—
ALFRED BROWN & CO.,
CITY LOCK AND BRASSFOUNDRY WAREHOUSE,
81, Smallbrook Street, BIRMINGHAM.

WOOD-BLOCK PAVING.



(MR. WHITE'S SYSTEM).
For Churches, Schools, Offices, &c.
Estimates and full particulars on application to
THOS. GREGORY & Co.
WOOD PAVING AND STEAM JOINERY WORKS,
Clapham Junction, S. W.



G. BRADY, MANUFACTURER OF Revolving Shutters,

Sun Blinds, Window Guards, Hoists, Lifts, &c.

IMPROVED SWIVEL PARTITIONS

(Brady & Peace's Patent),

In Wood or Iron, for dividing Schools, Warehouses, &c.

WORKS—
BROWNSFIELD MILLS, Ancoats, MANCHESTER.

GLAZIERS' DIAMONDS.



ILLUSTRATED PRICE LIST ON APPLICATION.

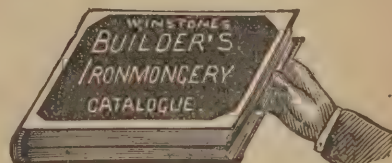
BUSH & CHIPPER,
11, President St., Goswell Rd., E.C.
ESTABLISHED 18 YEARS.

PILKINGTON'S

WORKS: **TILES.**
CLIFTON JUNCTION, NEAR MANCHESTER.

MANUFACTURERS OF HIGH CLASS TILES For Floors, Walls, Hearths, Grates and Furniture. EVERY VARIETY OF TILE WORK FOR CHURCHES, PUBLIC BUILDINGS AND PRIVATE RESIDENCES.

London Show Rooms: **LYRIC CHAMBERS, 45, WHITCOMB STREET, W.C.**
Manchester Show Rooms: **29, PRINCESS STREET, ALBERT SQUARE.**



MODERN FIRE PLACES AT MODERN PRICES. LOCKS AND FASTENINGS UP TO DATE. SANITATION AS IT SHOULD BE.

B. WINSTONE, CATALOGUE FREE. Cross St., Finsbury, LONDON

BRAMLEY FALL AND ROBIN HOOD STONE

In large quantities and any sizes supplied immediately, either dressed ready for fixing or in the rough.

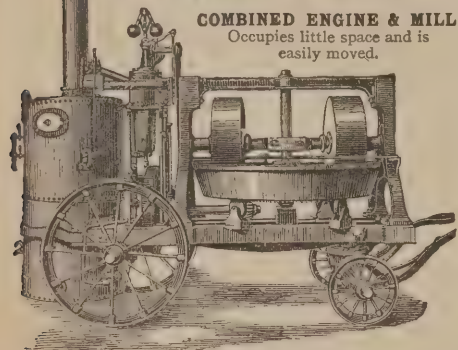
APPLY

B. WHITAKER & SONS, Ltd.,
HORSFORTH, LEEDS.

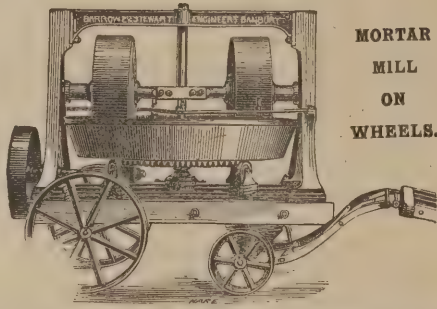
Telegraphic Address: "QUARRIES," LEEDS.

Telephone 2321.

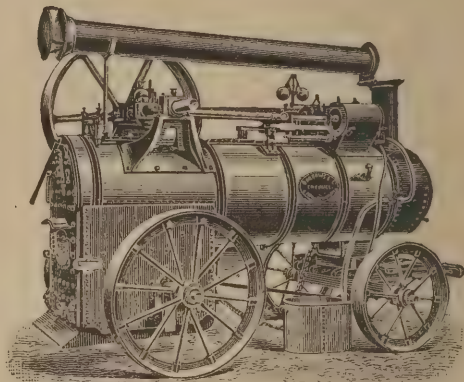
BARROWS & CO., LTD., BANBURY.



COMBINED ENGINE & MILL
Occupies little space and is easily moved.



MORTAR
MILL
ON
WHEELS.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills. Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:-

BARROWS & CO., LTD., BANBURY.

"MARPEDO,"

The New Sanitary Washable Water Paint.

VARNISHABLE WITHOUT SIZE. SUBSTITUTE FOR OIL PAINT AND DISTEMPER.

IMPERISHABLE, DAMP-PROOF, and ODOURLESS. WILL NOT CRACK OR BLISTER.

More Durable, and 60 per cent. Cheaper than Oil Paint.

MAY BE APPLIED (Inside and Outside) TO BUILDING, WOOD, IRON AND PAPER.

MARPEDO PETRIFYING LIQUIDS FOR DAMP WALLS. MARPEDO COMBINATION VARNISH STAINS.

THE "MARPEDO" COMPOUND COMPANY, READING ENGLAND.

TO BUILDERS and CONTRACTORS.

The London County Council is prepared to receive TENDERS for the ENLARGEMENT and ALTERATION of the FIRE ENGINE STATION in Farringdon Road, Clerkenwell.

Persons wishing to tender may, on applying to the Architect's Department, Fire Brigade Branch, 21, Whitehall Place, S.W., and on depositing the sum of £10 in cash, obtain forms of tender and contract with the bills of quantities, and may also inspect the drawings of the proposed work.

The amount deposited will, after the Council has come to a decision upon the tenders received, but not before, be returned to the tenderer, provided he shall have sent in a bona-fide tender, and not have withdrawn the same.

Tenders must be delivered at the County Hall in Spring Gardens not later than TEN a.m. on MARCH 19, 1895, and no tender will be received after that time.

Any tender not made on the provided form, or which has been altered, or is not filled up and complete in every particular, will be rejected.

The Council does not bind itself to accept the lowest or any tender.

The contractor will be bound by the contract to pay to all workmen employed by him the London Trades' Union rates of wages, and to observe the hours of labour and conditions recognised as fair by the London Trade Unions at the date of the delivery of the tender, and such rates of wages and hours of labour will be inserted in and form part of the contract by way of schedule.

H. DE LA HOOKE, Clerk of the Council.
Spring Gardens, S.W., February 20, 1895.

BOROUGH of SOUTHEND-ON-SEA. SANATORIUM BUILDINGS.

Builders desirous of Tendering for the ERECTION of one PAVILION, ADMINISTRATIVE BLOCK and OUT-BUILDINGS, are requested to send their names to the Architect, Mr W. Y. HOBBISS, Clarence-road, Southend, not later than MONDAY, the 4th MARCH.

Plans and specifications may be seen, and bills of quantities

obtained (on payment of £1 is. which will be returned on receipt of a bona-fide Tender) on application to Mr. W. Y. HOBBISS, on and after MONDAY, the 11th MARCH.

The Corporation invite TENDERS for the above WORKS, and the same sealed and marked "Tender, Sanatorium Buildings," may be delivered at my Office not later than FRIDAY, the 22nd MARCH at FIVE o'clock p.m.

The Corporation do not bind themselves to accept the lowest or any Tender. By Order,
Southend-on-Sea, WILLIAM GREGGON,
February, 29th, 1895. Town Clerk.

PARISH of ST. GEORGE-IN-THE EAST. TO BUILDERS.

The Guardians of the Poor of the above parish hereby invite TENDERS for PAINTING, REPAIRS, and sundry other Works at the Workhouse and Infirmary, Raine-street, Old Gravel-lane, E.

The Draft contract and specification may be inspected on and after FRIDAY, the 29th instant, at the Offices of the Architects, Messrs. WILSON, SON and ALDWICKLE, at the Vestry Hall, Cable-street, E., between the hours of TEN and FIVE.

The Form of Tender and the bills of quantities will be supplied upon payment of two guineas, which amount will be returned to persons sending in bona-fide Tenders.

Tenders, which will only be received upon the printed form, endorsed "Tender for Painting and Repairs at the Workhouse and Infirmary," and accompanied by the priced bills of quantities, are to be delivered at the Guardians' Offices not later than TWO o'clock in the afternoon of FRIDAY, the 8th MARCH next, and will be opened at a Board meeting at FOUR p.m. on that day, when parties tendering, or their authorised representatives, must be in attendance.

The Guardians do not bind themselves to accept the lowest or any Tender, nor will they pay any expenses incurred in preparing the estimates. By Order,

Guardians' Offices, J. R. BROWNE,
Raine-street, Old Gravel-lane, E. Clerk to the Guardians.
February 25th, 1895.

COMPETITIONS.

COUNTY BOROUGH OF WEST HAM. COMPETITION.

The Council of the County Borough of West Ham propose to ERECT a TECHNICAL INSTITUTE and PUBLIC LIBRARY in Romford Road, and they hereby invite Architects to submit DESIGNS for the same in competition.

Premiums of £250, £150 and £100 respectively will be paid to the Authors of the Designs which are placed by the Assessor first, second, and third in point of merit.

The Competitor to whom the first premium of £250 may be awarded will be employed as Architect, and will be remunerated in accordance with the schedule of professional practice and charges of architects, published by the Royal Institute of British Architects, such remuneration being independent of the premium.

The Council have appointed Mr. J. MACVICAR ANDERSON, F.R.I.B.A., 6, Stratton Street, Westminster, W., as their Assessor and Professional Adviser.

Designs are to be delivered at the Town Hall, West Ham, E., not later than FOUR p.m., on WEDNESDAY, 1st May, 1895.

Full particulars of the instructions and conditions can be obtained on application to the undersigned, on payment of a deposit of One Guinea, which will be returned in the event of the applicant either submitting a Design, or returning the instructions within one month from the date of receiving them.

By order of the Council,

Town Hall, West Ham, FRED. E. HILLEARY,
January 21st, 1895. Town Clerk.

IPSWICH.—MARCH 23.

DESIGNS are invited for the Building of a WORKHOUSE and INFIRMARY, with Specifications and Estimate. Premiums £100 and £50. My. A. F. VULLIAMY, Clerk to the Guardians.

The Builders' Journal.

Vol. I., No. 5.

Tues., March 12, 1895

ILLUSTRATIONS.

South Door, Rochester Cathedral	65	Portrait of Mr. John McKean Brydon	72
Cobham College Doorway.....	66	A Village Club.....	72
Portrait of Mr. H. Greville Montgomery	67	Chelsea Vestry Hall	73
Doorway, Barfreton Church	68	Chelsea Central Library	75
Doorway, Stone Church.....	69	The Wick Vicarage.....	77
Entrance to Canterbury Cloisters	70	The Glasgow Theatre Fire	78
Cobham College Fire-place	71		

CONTENTS.

Theatres and Fire	65	Wood Pavement	71	Facts about London	76
Measure for Measure	65	Society Meetings.....	71	Trollope's Black List	76
An Unhappy Business	65	Men who Build, No. 5—		Electricity from Water Power	77
Face to Face.....	66	Mr. John McKean Brydon	72	Architectural Ironwork	78
Sir Henry Rawlinson	66	Cotton, Crape and Silk Printing in Japan ..	74	Trade and Commerce.....	79
From Surrey Hills to Strand Temples	66	Plumbing	75	The Glasgow Theatre Fire	79
Bricks and Mortar	68	Jean Francois Millet	76	Correspondence	80
Oyez! Oyez! Oyez!	71				

The Builders' Journal.

Theatres and Fire. FIFTEEN years ago, the Glasgow Theatre Royal was erected by Mr. Phipps, on the site of a theatre which had been burned to the ground, and now that building is in ruins. It was, naturally, of fireproof construction. It would not burn, it was not made to burn, there was nothing in it that could burn; but it is in ruins. The fact, plain and unvarnished, carries out our conviction, that good planning—good entrances and exits, good staircases, good passages and easy gradients—is worth all the fireproof constructions in the world. We commissioned our artist to visit the ruins and bring us sketches, and from these and his report, many funny things appear to have happened. The concrete corridors and landings, built *in situ* on centrings, have been demolished. Mr. Potter tells us authoritatively that these floors are apt to give way in houses during a fire, because the portion of concrete below the neutral axis is undergoing a tensile strain, and hangs as a dead weight to the portion under compression. The startling unreliability of the corridors has “amazed” the Glasgow fire brigade officials, who, perhaps, know very little about the matter. The iron columns supporting the tiers appear to have held out very well, for they remain—although twisted somewhat badly—in upright positions. The whole of the auditorium as well as the stage was utterly destroyed, and once more the myths of fireproof construction of theatres are exposed. Mr. Phipps is commissioned to rebuild the house, and is already at work. He will, undoubtedly, try something better than concrete slabs for his corridors this time.

Measure for Measure. In a very interesting book, recently published, the author, Mr. Donisthorpe, is inquisitive about the yard. He has puzzled himself with the weight and measure standards of the Aryan races; what was the original yard? We should be entertained if any of our readers, be they architects or builders, would send us the result of any individual research upon this point. The architect can be as theoretic as he pleases, and the builder can measure up with his two-foot or by rule-of-thumb, but how did the yard spring into being? Was it the length of a man's arm, or the truncheon of arboreal man, or the width of his stride? We can fancy a man's arm had more weight among the Aryans, if not more inches. Both

hypotheses are probable. If we argue by evolution, we find that man's arm has shortened, the ape now having the advantage. Unquestionably, the early races used their arms more than we do, in the active, vigorous senses. They climbed trees and wrestled with animals; the “flint head” came in a day of comparative clumsy science. Then there were the tree-roots that Thor and his men used for walking-sticks, of capacious measure and problematical strength. These would be rough and ready measures. Finally, there was the stride of a man that cast a shadow on the ground. Mr. Donisthorpe seems to think the yard-standard was



SOUTH DOOR: ROCHESTER CATHEDRAL.

taken from the arm of Henry I., lasting down to our own time. If this be so, Henry First's arm achieved a more important glory than ever it won in battle. The yard-measure is mightier than the sword or pen, if we strike the balance in money. Think of what the yard has done! It has, with its attendant feet, trod mountains and mapped out countries; it has estimated the deep seas; it has doled out pretty ribbons to the pretty ladies of many centuries; it has been the builder's best guide and the architect's first friend; it has given men decent fitting clothes; it has been liberal to women in “white samite”

and fine garments. Surely, then, the yard has more sentiment than on the surface you would imagine. Prior to the ready arm of Henry I. people had careless, inconvenient ways, dealing by the handful, the needle-length (progenitor of the nail), the day's ploughing, the bovat: as much land as a certain number of oxen could plough in a year, and so forth. We read that the American Indians had a Dutchman's boot as commercial criterion, substantial enough, but slight withal. There is another fact of interest; the portly Romar was not quite so aldermanic as ourselves, while the classic Greek was a trifle bulkier. This should make the Shade of Homer shudder. We pass on in Mr. Donisthorpe's delightful work to the furlong, or furrow long. The furlong was as much as a plough, oxen-drawn, could do at a burst, and a little mediæval measurement soon proved that this was about forty times the length of the plough-pole. The average ox might differ upon the question of work and furlongs, in this, resembling all men, but that the furrow-long was a standard of strength is obvious upon the face of things, and standard of strength became, gradually, standard of measure. Then, again, the acre was a day's ploughing; square measure did not trouble the hardy Saxon, and he was happy, while the rood—the road—was the quarter of the area left unploughed for the carts to come by. The foot and mile were Roman importations, and, pray note, ye measurers by English mile, that the mile was originally a thousand paces, but was made to march to the tune of eight serious and hearty furlongs. Goth, Greek and Roman, Assyrian, Egyptian, Babylonian, had their primitive measures—stride, or oxen's strength or cubit. But the half-cubit—even in Mr. Donisthorpe's book—is beyond us: “One thousandth part of the length of a second upon a meridian multiplied by fifteen gives an old cubit or half-yard.” We are a little hazy here, but still have faith to walk. Now the yard is established, and each one is busy measuring his land or his neighbour.

An Unhappy Business. THE Cardiff controversy seems to us an unhappy business. In the interests of the profession it ought to be speedily brought to an issue and closed. The local Press is full of the hubbub, and Mr. Bruce-Vaughan and Mr. Seward are firing at each other on alternate days. It is all very disagreeable—and regrettable. Mr. Edwin Seward, formerly President of the Cardiff Architect's Society, is—as we pointed out last week—in a painful position. Into the right or wrong of the

dispute it is difficult to enter—at this distance. But the cleavage seems to be growing more and more acute, and the longer the affair lasts the more difficult it will be to restore harmony and good feeling. Mr. Seward still declines to meet the Society or to discuss his business affairs with those “who are concerned in an attempt to deprive me of an honourably acquired engagement.” Mr. Seward is “willing to await the issue of that just and right consideration which the authorities will certainly extend towards one who has acted diligently for them in respect to the Cardiff Museum and Art Gallery.” It will be remembered that Mr. Seward claims to be the properly appointed architect—by Corporate resolution—of the new museum and art gallery, for which a site has been obtained elsewhere than originally intended. The Museum Committee contend that, not having met, they could not have appointed an architect, although it is admitted that Mr. Seward has acted in an “honorary capacity,” and that he was commissioned in 1890 by the Cardiff Corporation to prepare plans for the extension of the Free Library, Museum and Art Gallery. That resolution, not having been rescinded, would seem to us to hold good, notwithstanding that, latterly, it has been decided to remove the Museum and Art Gallery to another site. The Library is being completed, we take it, from Mr. Seward's original design. There must be something underneath the surface of all this, and we should like to see the matter bottomed. Why the Architects' Society, aware of the original resolution, should have memorialised the Corporation to throw the final portion of the scheme open to competition at this late hour we cannot imagine. To the best of our intuitive common sense the whole quarrel would seem to rest on the question whether the scheme of 1890 was one homogeneous scheme, or a patchwork of three ideas, and liable at any time to be decentralised or split up so long that the buildings, or any portion thereof, remained to be built. Mr. Bruce-Vaughan, the present President, is as emphatic as Mr. Seward. He repudiates as “a base, unworthy and groundless charge” Mr. Seward's assertion that the Society had influenced the Corporation to deprive him of the work. Mr. Vaughan says he is open to be convinced of Mr. Seward's “moral and legal right” to act in his claimed capacity, but, meanwhile, Mr. Seward will not meet the Society. We would suggest that an architect of acknowledged eminence be called in to arbitrate. It is a painful quarrel as it stands.

Face to Face.

EVERY evening paper in London devoted the whole of its Contents Bills to the startling head lines of the horrible domestic tragedy that shocked the inhabitants of Lower Tooting in the early hours of Thursday morning last. But not one of these evening papers sought to point a moral from the simple lesson the tragedy appears to offer. Frank Taylor was a plasterer, an honest, clean, industrious and sober man, out of work unfortunately through the recent spell of hard frosty weather. Taylor had a wife and seven children, the eldest of whom was fourteen years of age. The wretched man, fronting the pangs of poverty, and perhaps of insufficient food, drew a razor across his wife's throat and then methodically murdered six out of his seven little ones by the same weapon, and finally killed himself. The eldest son, who will recover from his injuries, gives the dramatic details of the tragedy. London has nearly forgotten the whole messy affair, although it is not often that such a wholesale slaughter excites the commercial interests of its journalists. The point is a very simple one, and we distinguish it entirely from all faithless expressions of horror which satisfy the emotional susceptibilities of

thoughtless persons. By what moral right, we ask, did Frank Taylor possess himself of seven children? Perhaps the same question presented itself to the wretched man on the night preceding the affair, and not being able to answer it satisfactorily, he met the case in a bold and maddened fashion, and destroyed what he had been the means of creating. We spent a recent holiday in the workshops of a country builder, giving scope to our pretty turn for joinery, and laying in a stock of brain energy by exercising our body by sheer hard physical work. We wheedled out the history of the men who worked at our side, and, with a single exception, they were the parents of from five to eleven children, and not one of them averaged a weekly earning of more than thirty-two shillings a week, some as low as twenty-eight. We devoted many an hour with those men to a discussion of this terrible condition of things, and we believe we made a little temporary impression, but something far more potent than an individual effort is needed to put things right. The hordes of lazy vagabonds who prostitute all moral and economic reasons, who lounge about the street corners under the careful tuition of professional agitators, fuming fire and brimstone upon every tradition of decent life that does not assist them



COBHAM COLLEGE DOORWAY.

in their desire to get what they have not toiled for, and reap what the Almighty never intended should be theirs, never give a thought to these things. The man who sees facts, not as through a glass darkly, but face to face, and who can by any powers of conviction show these poor fools what they do, by bringing small armies of people into a crowded world, will lighten the problems which for half a century have utterly baffled the brains of the finest political and moral economists of Europe. And, for the love of God, let some of us try.

SIR HENRY RAWLINSON.

WE regret to record the death of Sir Henry Rawlinson, Orientalist, explorer, and Assyriologist. Of all the officers employed in the first war in Afghanistan, he was the most successful, and he remained through a long life the ablest expositor of the “forward policy” in relation to the Indian frontier. He had an unshakable conviction, says the *Spectator*, that our real enemy in Central Asia was Russia, and he pleaded steadily for a policy which, wrong or right—and we venture to doubt it still—is now supported by every expert familiar

at once with the country and with arms. He knew the language and literature of Persia as few men have ever known it; but his greatest contribution to modern thought was his discovery in 1846-49 of the way to read the cuneiform inscriptions in Behistun. That was at once a triumph of learning and of insight which placed him at the head of all Assyriologists. His claims were never seriously questioned, either in Germany or at home, though others starting from the foundation of his knowledge may have outstripped him in the race of discovery. Throughout a long life, he was always consulted, and his innumerable papers on Asiatic antiquities and Asiatic policy will, whenever they are collected, be found a mine of information. He was latterly, perhaps, a little too fixed in his opinions, and he rapped sciolists roughly; but he was a sincere man, and the vast stores of his memory were always at the service of any one whom he believed to be honestly searching for the truth.

FROM SURREY HILLS TO STRAND TEMPLES.

A CHAT WITH H. GREVILLE MONTGOMERY, OF THE BUILDING EXHIBITION.

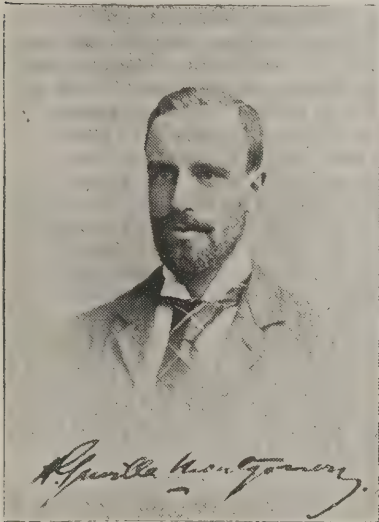
SOMEWHERE in Surrey, though I cannot bring my mind to say where, seeing that it is still sweet in the old World's ways, and frank and fair with the breath of Surrey Hills, is a quaint place where old cottages are glad to live and old barns are thankful to tumble down, finding a rest after serviceable days. It is all just what one may find in Surrey without looking, stumbling upon its prettiness and its peace by happy hazard; or you may look for such a curious corner and still not find. There is a hamlet in a vale where people are content to dwell, and there is a hillside where the man of town may gain the view that is to last him through the piled up papers of the day; a vista glad as any perfume in a garden. A scrub of common gives breadth and breeziness to the greeting; o'erhanging gables make you look up for the girls of bygone days; there are finger-posts directing you to Nowhere, and you are glad to go; and, here and there, green ruin, instead of grey, makes the picture prettier, though plaintive, ending the sweetness with a sigh. This is no Arcady of the imagination; Leader paints near by those gleams when lights are low, that stunted spire black against a saffron sunset; the trees black too, and the houses dimming; here and there the flicker of a candle in a darkened home; the pale chastened water-stretches, timidly reflective of the sober sky; the sense of calm after storm and smile after rain—can you not hear the curfew toll the knell of dying day? Here, too, Doulton, famous for decorative ware, is content to farm and lose a pound an acre, and up on the hill-top, guarded by pines, the air scented by resins and layers of needles, is the home of the man who has set his shoulder to the Agricultural Hall, and pulled the Building Exhibition project through.

Who cares to come, from all this sense of freedom and fresh air, even with Mr. Greville Montgomery, to his station, though the cob goes well, and you spin through the three miles that lead you there?

It is a different business on the fourth floor of the Outer Temple, Strand, with the Law Courts a-buzz opposite; the eternal “lift” that bears you upward, and is never there to take you down; the glimpse of mere sky, and thankful for that, one may obtain in Mr. Montgomery's private room. You are in the midst of plans and papers; there is little scope for your picturesque principles; and a disordered window-sill, a comfortable chair, and no place for the sole of your hat are the

rewards of mounting this, one of the few temples that men enter; possibly the only elevation a few men reach.

Mr. Montgomery is thirty-one years old, and, though he grows a beard, his eyes light up so that you forget the graver air. With not the faintest intention of asking him any questions, and fully aware that we only needed to talk, I got Mr. Montgomery to speak of himself. He did this pleasantly, and I found it a pleasant subject, full of the unexpected and utterly the reverse of prosaic. I think we may be said to have talked all round the building, and presently we got back to that start in life which so very soon seems so very long ago.



"I am Surrey, sheer Surrey, and there is no county like it in the kingdom!" His eyes gleamed.

"Oh! say the World," said I.

"The World is not cut up into counties," said he, looking as if he had scored.

"But the pride of *your* county is your country. The World is cut up into *that*," said I.

Someone outside thought he heard a laugh, and this is a bad sign when you are waiting.

"But the beginning?"

"Oh yes. Well, do you know, I was eighteen and quite green from college, and I was stupid enough to reply to an advertisement in *The Times*, and Mr. W. S. Caine, M.P., afterwards a Lord of the Admiralty, was kind enough to make me his private secretary, and I told him I knew little or nothing about it, and he told me there were five hundred and fifty applicants, including some forty 'varsity men, and that my one suitability seemed to be I had asked a higher salary than *than any of the forty*."

"I refrain from remarking upon that trite subject: Luck," said I. "Now and then it is a good thing, even for a young man to aim high."

"And Mr. Caine was one of the best friends I ever had, in fact I owe more to him than to any other man, and when I ventured upon a hankering for journalism Mr. Caine was very emphatic. 'If you go into journalism you will starve,' said he."

"One can't starve in Surrey," I ventured; "there are always the fruits of the field and the fowls of the air. But did you?"

"What?"

"Go into Journalism?"

"Not altogether just then. I exchanged the Commoner for the Peer and became secretary to Lord Yarborough."

"What Brocklesby?"

"Yes! Brocklesby!" looking surprised.

"And Thornton Abbey with its splendid gateway and its niches not left desolate, and

the stone-vaulted drawing-room in the Abbey Farm?"

"Yes, *how do you know?* 'And Thornton Abbey?'"

Then we fell a-talking of a county dear to both, though native to neither; a county of calm country days and long summer sunlights in Brocklesby Park; of the scarlet Hunt in old-time Brigg, where you may sleep under an "Angel's" roof; of the broad river bounding northern Lincolnshire; of the days when there seemed little to do, and Mr. Montgomery wrote two or three letters a day until Lord Yarborough told him he was simply spoiling his chances and letting his abilities lie fallow there.

"And now Journalism?"

"No. I was secretary to Sir Edmund Lechmere next; that would be in 1885; and, finally, secretary to the late Duchess of Montrose."

I looked at Greville Montgomery wondering if he were a Dr. Jekyll and a Mr. Hyde. But the smile was still boyish and clear.

"And you could tell me some stories—not quite architectural?"

"There is a slight unfriendliness between *could and would*."

"Oh, yes; I know. But this haunting idea of Journalism. You burned your boats after the 'battle with Montrose.'"



"I did; and lived in Shere and sent up articles and did interviews for anyone who would take them, and nearly fulfilled Mr. Caine's prediction. And then I joined *Pearson's*, and perhaps, without unpardonable vanity, I may say I started some decent journalistic ideas there. Did you know 'Famous Faddists' and 'How the rich live'? And then I left."

"Your 'individualities diverged' as one might say."

Greville Montgomery laughed, and the man outside wondered if he would be still sitting there at the crack of doom.

"And then the *British Clayworker*—that clever little trade monthly of yours. Who threw that hearty brick at your head?"

"I had been carefully thinking of a trade journal, and a man came to me and suggested one for clayworkers. I asked him if he would enter into partnership with me, and his reply was, 'Not a penny.' So much for his faith in the idea. But we have been going three years now, and you have only to look at our forty pages of advertisements to feel comfortably convinced of our success. Do you know, my timid friend suggested, mildly, that a share of the profits would seem his little perquisite; but I'm afraid no one else could see his discretion in that light."

"Why! we are actually at 'the Exhibition' after all," I said.

"Are *you* really," said he; *my* thoughts are very much at home, there, just now. Do you know, the Exhibition is a success this time. The real thing; no humbug. Look here. Look at this plan. Do you see all those stalls marked off; they are taken and *paid for*. Take one particular branch. We shall have eleven brick-making machines at work; at the Royal show you will never see more than five. You will be surprised with the magnitude of the show, and so will the public. We are entirely excluding the bazaar element; we accept *bona fide* exhibits only. I believe in making a thing go, once you have made up your mind. When I took the Exhibition in hand, some of my friends warned me of certain failure; two other men had failed, how could I make it succeed? That is just it. One man can make a project go, where others have failed. Others, perhaps, have not gone on long enough. I said 'there is no question of success; it must and shall succeed.' But it has entailed upon me an enormous amount of work, and I have even had to give up dear old Surrey—save at the week ends. A fortnight hence we open; the A. A. and the Institute have countenanced us; we shall have handicraft competitions in bricklaying, carpentry, joinery, masonry, smithing, plumbing, plastering, decorating and tile-fixing. We shall give medals; the technical schools are jealously in

our favour; materials will be tested; we shall have lectures—Professor Banister Fletcher on 'Architecture,' Mr. Collins on 'Sanitation,' Mr. Arnold Statham on 'The Law relating to Building Contracts,' and so forth. The Building Exhibition will astonish the pessimists. We have attempted to pull the Exhibition out of disrepute, and we have won."

"And to win—in anything—is to wish for a fresh conquest."

"That is my creed also."

And then, after I had risen to go, I sat down again, for H. Greville Montgomery can keep you entertained, and the man outside, hearing fresh loud laughter, mistook *that* for the crack of doom!

MR. ALFRED GILES, late chairman of the Union Steamship Company, and ex-president of the Institute of Civil Engineers, died on Sunday night. For some years Mr. Giles represented the borough of Southampton, of the docks of which port he was the engineer, succeeding his father in this post. He designed the dry dock there, which in its day was the largest in the world, and also the Empress Dock, opened on July 26, 1890, by the Queen. The growth of the port under the care of the London and South Western Railway amply justified the policy advocated by Mr. Giles of keeping that port as the company's head quarters.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
12th March, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

Is it a piece of satire that the whole block of buildings belonging to the Improved Industrial Dwellings Company, at Highbury, has been without water for a month? "Betterment" may get beyond comfort. An ordinary inmate of an ordinary house is nearer the water main, and this has meant improved language since the pipes gave up activity and settled down to suspended animation, leaving the householder in animated suspense. A man—a "Sufferer"—an Industrial In-dweller, complains that sixty stairs led him down to the friendly, unfrozen pint of water. The man surely desires to say steps. Sixty steps are a decent little treadmill of themselves. But he makes the mistake of living at the top of an Industrial Dwelling. A "Sufferer" wishes to know why the Company does not set up a temporary hose-pipe or something for the benefit of its own customers. Seeing that the thaw had set in the Company turned off the water, as if it had not been off long enough. This was to obviate any indecently deluging "bursts." After this, the Industrial Dwelling Company's occupants will be tantalised to read that "the pipes" do not freeze in Russia. The houses are very rarely without water in St. Petersburg, and then only for a day or two. You see they manage these things better by burying the pipes deeply, beyond the grip of frost. What may be described as the plumbers' harvest is reported from Liverpool. Since the recent severe weather no fewer than 12,230 lead pipes have burst. The consumption of water, owing to taps left running, has been enormous, the quantity being 57,000,000 gallons in excess of that used in the corresponding period of last year.

THE author of "The Gentle Art of Making Enemies" has now added another name to his list—Sir William Eden. The dispute between Mr. Whistler and Sir William, which has been under discussion in the French Law Courts, is in many ways instructive. For one thing it affords a commentary upon the unbusinesslike habit which most artists possess of allowing a patron to leave open the question of price until the picture is finished; for another, it throws a light upon the mental valuation by which even a more or less enlightened patron appraises the productions of artists of all ranks. It shows that on neither side the contract to produce and accept a picture is regarded as more than a vague understanding, a careless arrangement in which all the important points are to be left over for subsequent settlement; and it proves that there is still in the art world an amount of idyllic confidence in human nature. Mr. Whistler, with his rank among living artists, and his

knowledge of the manners and customs of the picture buyer, was inexcusably careless to allow himself to be persuaded to set to work upon the disputed picture under a shadowy agreement, which was open to any amount of re-arrangement. Sir William Eden, on the other hand, cannot be congratulated upon his rather contemptuous method of bargaining with an artist of Mr. Whistler's standing. The impressionist painter must be meditating a Nocturne upon the Baronet, or it may be merely a bad quarter of an hour—not, at any rate, a pleasant "impression" for either side, or the art world generally.

BELGIAN iron has fought its way into English markets, but our railway rates and the cost of English labour are not entirely responsible for this. According to a correspondent in the *Engineer*, there is an element in foreign competition which is not so much taken into account as its importance demands. Recently, he says, an iron roof, 50 feet by 40 feet, was required within three miles of Charing Cross. The order went to Belgium. "Cheapness, of course," most people will be ready to exclaim. Well, partly owing to



BARFRETON CHURCH.

that, but principally, adds the correspondent, "because no native firm could be depended upon to deliver it within the prescribed time." Now, why should this be? Labour is, no doubt, cheaper abroad, and longer hours worked; but is there any reason why these difficulties should have a third added in uncertainty of delivery? The inference to be drawn is that the English firms are either not able or willing to cope with these swift and sudden orders. They are employing workmen up to their contract necessities rather than to trade possibilities. Yet, considering the general scramble, it is a serious business to read of work like this going abroad. It is notorious that Belgium iron can be dumped down in England at an extraordinary cheap price in any accessible town, but that orders are going to Belgium simply because English firms cannot undertake to complete their contracts by a definite day is new news. We should imagine the uncertainty in the labour market—outcome of much trade agitation and irritation—is responsible for this. The cheaper labour

and longer hours of Belgium workers are sufficiently formidable in themselves, without any further handicapping.

THE most expensive private residence in the World—that of Mr. Cornelius Vanderbilt, which stands at the corner of Fifth Avenue and Fifty-seventh street in New York—has at length been completed. It has cost a million; and a small garden adjoining it, on which stood a twenty-five thousand pounds house, has cost one hundred thousand pounds. As it will only be occupied six months in the year, the rental will figure out at about three hundred pounds a day. This rental is a little beyond the average man.

THE strike of operative painters at Douglas seems to be a serious business. It is the old story: the men allege they are paid less than English painters, and they feel that the wages should be levelled up. The painters form a large and important industrial body, and have all struck work with the exception of about a dozen non-society men. The masters declare that they intend to resist the demand of the men, and the latter are equally firm and determined. The Masters' Association has had a meeting, and see no reason to depart from the decision already come to, not to grant the increase in wages asked for. So far there has been no "picketing" of the few non-society men at work, but a strike of painters in the spring may make its mark upon the Douglas season, leaving the stucco grey—instead of gay. It takes some paint and equal whitewash to keep Douglas in order, and even then the place is scarcely respectable in August.

THE receiving days for pictures at the Royal Academy are the 29th and 30th of this month and April 1st, and for sculpture April 2nd. The winter exhibition closes on the 16th inst. The receiving days at the Salon des Champs Elysées are, for pictures, from March 14th to 20th; for drawings and water-colours from March 14th to 16th; for sculpture from April 1st to 5th; for busts, medallions, &c., from April 1st to 3rd, and for architectural drawings and engravings from April 2nd to 5th. The new English Art Club will probably receive on April 1st.

THE use of glass of a green tint has, for half a century, been a characteristic peculiarity of the plant houses at Kew Gardens. In 1889 the experiment was made of substituting white glass for green in the east wing of the tropical fern-house. The improvement in the growth of the plants was remarkable. In 1892 a portion of the west wing was also re-glazed in the same manner, and the new temperate fern-house was wholly glazed with white glass. The result with the *Gleichenias* and other half-hardy ferns was everything that could be desired. As the result, it has now been determined to abandon the future use of green glass altogether.

WE note that Dr. Cameron, Medical Officer of Health for Leeds, has tackled the unhealthy area question. This can hardly be in view of our remarks last week, yet the coincidence is singular. At the meeting of the City Council, held on Wednesday last, Dr. Cameron submitted what is described as an "official representation." So often official documents and true representations are at variance, we welcome this bold Cameronian attack. The more so that it does not flinch. The unhealthy area is clearly set forth, street, lane, —and letter. "Certain houses, courts and alleys within that area (specified) are unfit for human habitation; the narrowness, closeness and bad arrangement of the streets and houses, and the want of light, air and ventilation and other sanitary defects are dangerous or injurious to the health of the inhabi-

tants; finally, the evils connected with these houses, courts or alleys, and the sanitary defects, cannot be effectually remedied otherwise than by an improvement scheme for the re-arrangement or reconstruction of the streets and houses within such area." Here is a piece of straight speaking, nothing burked or buried. Leeds has shocking slums in its midst, in this respect neither better nor worse than other large towns. Towns, as they grow, congest and contract their centres; the axis becomes rotten, while the spokes radiate suburbanwards. Fifty years ago a stringent system of surveying and planning would have prevented all this, but instead, of supervision, towns enjoyed the sportive privilege of going and growing as they pleased. We are paying the penalty now in the enormous prices for the clearance of wretched and ruined property. Our grandfathers failed to recognise that right angles and fresh air are first cousins, and so the crooked is still to be made straight, and the rough places plain; until that is done, we shall suffer in health or in pocket. The Corporation of Leeds would seem to be willing to back up Dr. Cameron.

THERE is no end to the uses of advertisement, and one questions the "sweetness" of Adversity's victor. Puffery and picturedom attacked Switzerland a while ago; now the "art" would seem to have reached its climacteric at Geneva. The latest contrivance is called *l'affichage sub-lacustre*, and consists of advertisements which can be read several feet under water, the subject being painted in yellow letters on a black ground, and so placed that the words are magnified. It is at the Pont du Mont-Blanc, in the crystal clear waters of the Rhône, that this deformity is first to appear. One may well cease, in a poetic moment, from gazing into the "glassy surface of the lake," seeing that it now makes eyes at you, recommending you to wash your face, perhaps, or use so or something for your hair. The Pyramids have been made "useful" in this fashion; the Alps have taken to patent medicines, instead of their own keen, life-giving air. The night itself is not sacred, witness the flashing frankness of more than one much advised pill. Now the lakes are wearing lables in their bosoms—the pretty keepsakes! We expect Narcissus would be sadly surprised if she went to her Well. She would not know her own face amid these floating phrases, yet, being a woman, she might not be happy till she "got it," whatever it might be.

WE hear that a memorial bust of the late Lord Coleridge will be placed in the Royal Courts of Justice. A number of his legal and personal friends think that his memory deserves to be so honoured, and they intend to ask the authorities to assist them in this project. The only Judge to whom, as yet, a monument has been raised in the Courts is Sir George Jessel. There are two statues in the edifice, but neither is connected with the Bench. One was erected to the memory of the Architect, and the other to the Clerk to the Commission which arranged the building of the Courts. So that Art has even won recognition in the Courts, while the Law itself, with one exception, has modestly hid its face. But then the Law is always with us like the poor, though Judges pass away.

SPEAKING of Art, we have been reading the confessions of a tattooist. The tattooist, it seems to us, is legitimately engaged upon the decoration of man. This is Sculpture, if not Architecture, and some authorities say the two things are akin, though more than one learned spokesman took a different view at a recent A. A. meeting. However that may be, the tattooist cannot be condemned

for lack of "originality of line." "Here," said he, "are my tools, a number of pen-holders, on the ends of which are fixed small needles, two or more in number. With these the skin is punctured. A small device can be done in an hour; a large one takes about six hours; and over one exceptionally difficult design I was occupied no less than 22 hours. My charges depend on the size and intricacy of the pattern to be tattooed. They range from 4s. or 5s., for which I can tattoo a simple monogram or crest, to as much as £20." A tiger stalking prey would seem to be a favourite pattern, but there are people who prefer to have a fox hunt tattooed all down their back. We say again, at the risk of becoming trite, there is no accounting for taste. We expect shortly to hear that a paper has been read upon the effects of Light and Shade in tattoo. We hope the author will not serve an injunction upon us, for we shall make all effort to report it. There can be no question: Man can, *after all*, be "architecturally examined!" The tattooist says nothing about Woman.

THE most recent of the small exhibitions opened at the Fine Art Society's Gal-



STONE CHURCH.

lery consists of 80 water-colour drawings, by Mr. George S. Elgood, representing "Gardens in Many Lands." They have been painted in various parts of France, Italy, Spain, and North Africa, and should furnish many useful hints in the laying out of grounds and in the proper development of that picturesque environment which so helps to set forth an architect's designs. The subjects have been judiciously selected, and many of them are depicted in a manner showing, not only the most careful observation, but an appreciative sense of their especial character and beauty. "Ilex Avenue, Villa Borghese," "The Campagna from the Villa Aldobrandini," and the small "Villa Lante, Viterbo," are among the best of several drawings in which rich renaissance architecture and ancient trees are exquisitely blended.

SOME hidden machinery is evidently needed to help the spontaneous eloquence of more than one eminent divine. We are informed that the pulpit in the nave of Westminster Abbey has a movable floor, which can be

raised or lowered at pleasure to suit the height of the preacher. One day a very short man was expected to preach, and the pulpit floor was raised considerably. Being prevented by illness, or some other cause, he was unable to fulfil his appointment, and at the last moment a substitute had to be provided. The clergyman who obligingly undertook the office proved to be a man of lofty stature, of stature considerably above the average. On reaching the head of the pulpit staircase he saw to his dismay that the official in charge of the simple machinery had apparently not been informed of the change of preacher. The tall divine scrambled into the pulpit on his knees, a very correct but more than an uncomfortable position, seeing that he preached his sermon without the use of his legs, so to speak. It was fortunate his abilities lay in his head.

WITH the view to obtain hints which may be useful in the designing of contemplated extensions and improvements in the Kirk-gate Markets, Leeds, about a dozen members of the Corporation Markets Committee, including the Chairman (Mr. Knowles), recently devoted a couple of days to an inspection of the markets in Birmingham, Liverpool and Manchester. Proceeding to the Midland city, the deputation got an idea of what the fine meat market which is in course of erection will be when completed. From Birmingham the committee journeyed to Liverpool, and saw the wholesale and retail fish markets and the splendid meat market which is being built there. They then took train to Manchester, where they found much to interest them. This is a thorough-going way of obtaining the very latest information.

JAMES NASMYTH was one of the most instructive companions I ever met with writes Mr. John Murray. With him there was no attempt to monopolise conversation, but a modest, quiet way of imparting his information, which was enhanced by his broad Scottish accent and his practice of illustrating every point, either by a simile or by a pencil sketch, generally drawn with his left hand, for he was a strenuous advocate of the use of the left hand as well as the right on all possible occasions. I never knew him converse on subjects which he had not mastered, or at least studied; but, even with this limitation, his information seemed inexhaustible. It so happened that I had crossed the Tay Bridge in a gale of wind a few weeks before its collapse, and was talking to him about it, when he said: "It has always seemed to me that the constructors of that bridge made a great mistake in taking the letter I instead of A for their model. Look here," he continued, rising from his chair, and straddling his legs wide apart, "you give me a push sideways, but you can't move me. Now" drawing his feet close together and standing bolt upright—"the least lateral pressure will upset me at once." He confessed to possessing but little knowledge of the higher mathematics, or belief in their use for the work in which he had spent his life. He was a firm believer in "Consols," which he used to call his "antibilious stock," because it never caused him a sleepless night or a headache in the morning; but the conversion was a severe blow to this comfortable doctrine of his. One of his favourite schemes, which I believe he laid before the authorities of the Admiralty, was for the construction of a craft for "bandboxing" ships of an enemy. This craft was to contain a long iron beam, running fore and aft, and ending at the bow in a blunt nose just below the water-line. His idea was that these vessels should be very quick and handy, and float very low in the water, so as to ram an enemy's ship, while affording the least possible mark for shot or shell. The idea of arming a costly

line of battleships with a ram, which in action was likely to prove as injurious to the striker as to the struck, always appeared to him erroneous.

THE discovery has been made that the rays of the arc light have a decided therapeutic value, and that the naked arc, *i.e.*, without a glass globe, may be a very useful disinfecting agent in hospital wards and places where the rays can be projected directly on the organisms. Experiments were made in this way in the Paris sewers, with the result that considerable purifying action was noted. Anyone who has frequented arc light stations must have noticed the pleasant odour of ozone around them caused by the generation of the current. In some of Nikola Tesla's wonderful experiments with high tension currents a remarkable quantity of ozone is given off, and care has, in fact, to be exercised not to ozonize the air too much in this way. Sunlight is a great disinfectant and purifier, and, as electric light approximates to it, one can understand something of this power to arrest bacterial development, and to sterilise sources of infection and corruption. While this is true of the arc light, which burns in the open air, the incandescent lamp has another distinct advantage over ordinary illuminants in the fact that there is no combustion going on inside it, and that it, therefore, does not consume the oxygen of the air and vitiate the atmosphere. Both kinds of electric light—the arc and incandescent—can be used in giving patients a bath of light, with a result equivalent to a combined light and vapour bath. The skin is browned as if by sunburn, and the effect is described as most salutary. The light is used in this work in combination with a lens and reflector for localising the rays.

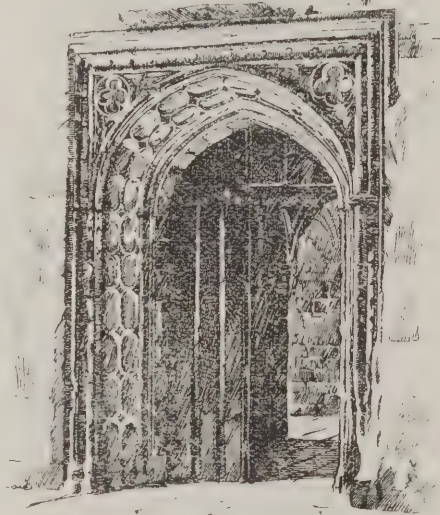
THE Art writer whose contributions are signed "R. A. M. S." has been expressing his views on etching, but he broadens for a moment into a greater theme. He says:—"A man who lives facing a noble view ceases to look at it, in spite of the variety of weather, unless it be for the going and coming of ships, the passage of troops, an unusual display of fireworks, or some such exceptional and transitory interest. In fact the voice of nature palls unless the subject is continually changed. It is the privilege of the work of art to speak two languages at once. While pretending merely to recount the details of a building or to reconstruct the topography of a country side, it can discourse nobly in the musical language of proportion, in the poetry of related lines, in the harmony that comes from an artistic control of all the material used. This secondary, this decorative speech of the picture, keeps gently appealing to you while in many of your moods the importunate statement of natural facts knocks at a deaf ear. As he pursues a very conventional branch of art in which he can imitate very little of nature, the etcher is forced to make patterns that strike the spectator, that soothe his eye by suavity, or stimulate it by an unforeseen vivacity. Above all, everything must count, everything must co-operate in the result; superfluity is disastrous. The force of the impression produced is in inverse ratio to the amount of means used. When you have learnt something about the architecture of the cathedrals or counted the trees in etchings like Mr. Burgess's "Peterborough Cathedral," Mr. Law's "Durham," Mr. Bird's "West Front, York Minster," Mr. Haig's "On the Stour, Canterbury," and even Mr. Slocombe's "Spring Time," which you can do rather less easily than in a photograph, what is left for you to look at? Nothing intrinsically beautiful, subtle, or varied in aspect. In this kind of work all details are given the same value and architectural features are shown with the same pertinacity from top to bottom of

a cathedral. The result is something without beauty of line, without dignity of mass; a scrabble of small scratches out of proportion to the size of the plate." There is a touch of acidity, as well as of acerbity, in the criticism. "R. A. M. S." writes with the "needle" rather than the pen.

THE series of six sketches dotted through this number are from the National Silver Medal drawings made by Mr. Harry P. Clifford and they are the very finest pen drawings we ever remember having seen.

It is well to be early in the field. We desire to draw the attention of our conflicting County Council to the condition of Trafalgar Square. Notwithstanding the fact that it is within a few yards of the seat of wisdom, the slush now reposing in heaps about Trafalgar Square, originally fell as snow on the 23rd of January, and was added to by a second fall on the 5th of February. The mild weather has done much to reduce these mud monuments, but the subsequent drainage across the footpath is insult to injury.

HEAT without light, and, therefore, with the expenditure of a minimum amount of energy, has been rendered nearer a reality than before by the experiments of Professor Ebert. These results were obtained through the medium of vacuum tubes with the aid of electric alternating currents of high frequency. To attain a candle power of from one-thirtieth to one-fortieth of that of a standard English candle, he found the energy



ENTRANCE TO CANTERBURY CLOISTERS.

actually expended to be only about one-millionth of a watt. Yet the efficiency of his "luminescent lamp" is said to be many hundred times that of the incandescent lamps now in use. "Cold light," therefore, promises to be one of the actualities of the future.

A PARAGRAPH in the *Times* set forth that the largest gift to the Centenary Fund of the Methodist New Connexion had been made by Mr. Littlewood, of Sheffield, "who contributes £3,000 towards the erection of new school premises in connection with Scotland Street Chapel in that town." This set a correspondent thinking: "Mr. Littlewood, of Sheffield." The thought suddenly struck him—"this may be the Mr. Littlewood who gave a ring of bells to Walkley Church. But it is not usual for Church and Chapel to be thus generously helped from the same hand. I went to find Mr. Littlewood. I succeeded beyond my expectations, finding both Mr. Littlewood and his wife, 'my book-keeper, cashier, and traveller,' as he good humouredly introduced her." It may well be expected that a man can afford a little belfry harmony when his wife is all that.

At a little place called Tutbury, there would appear to be an extraordinary dwelling. The District Council met on Thursday and shook its head sorrowfully, but could do nothing. The inspector said the dwelling was situated near Postern Farm House, and was built of half-brick—*i.e.*, four-and-a-half inch—walls, which were, of course, very damp; the plaster was falling off, the ceiling tumbling down, the pantry roof giving way, and the out-house and pig-sty completely in ruins. The occupiers were a woman and her son, who kept a cow in a wooden shed reared against the four-and-half inch wall, separating it from the bedroom, and a donkey in the ruined pigsty: while three dogs were kept in the house, and twenty fowls had the run of the interior, monopolising the chairs and tables. The inspector was of opinion that the "house" was not fit for human habitation. Some members said the cottage was locally known as "Tin-pot Hall," and another wanted to know whether the tenants were Irish. The matter was eventually referred to the medical officer, and "Tin-pot Hall" continues to stand until he comes to the rescue of its inhabitants. There is more vice than virtue in a four-and-a-half inch wall.

"LACKING in distinction, and not overburdened with originality," is a criticism that reaches us with respect to the Spring Exhibition of the Royal Institute of Painters in Water Colours, which opened yesterday. One of the attractive features is the contribution of the President (Sir James Linton), which deservedly occupies the place of honour. This is a notable departure from the type of composition, ordinarily some mediæval scene, which the veteran artist usually essays. It represents the three-quarter length figure of a fair-haired girl in a dress of russet brown and grey, her delicate features and wealth of auburn hair being well set off by a broad-brimmed Gainsborough hat. The exhibition is exceptionally rich in landscapes, some of them being works of unquestionable merit.

In a paper recently read before the New York Academy of Sciences, Professor Woodward arrives at the conclusion that the earth is "solid," that, as Lord Kelvin contends, it has no cavities below a comparatively shallow depth. The only fluidity is when, from some local cause, the pressure is somewhat relieved. Otherwise the earth must be, instead of molten in the centre or with a plasma of liquid matter under the crust, nearly as homogeneous as steel. But movements of the crust, such as subsidence, elevation, crumbling, &c., have still to be accounted for, and these the solid theory fails to explain with anything like satisfaction. Lord Kelvin's conclusions as to the world's age, which we noted very recently, are criticised rather severely as resting on "very questionable data," and as having "fettered geological thought in the last thirty years to too narrow limits of time." Yet, as the time allowed has risen from twenty million to four thousand million years, surely the geologists ought to be content. The world will soon grow young again out of very age—we would suggest that its second childhood has arrived.

WHILE there can be but unanimity of opinion as to the desirability of any measure that would lessen the number of trade disputes, it cannot be said that the Bill introduced by Mr. Bryce seems calculated to produce that result. It would enable the Board of Trade to create Conciliation Boards, but as the appeal to their services would be optional, and as the Boards would have no means of enforcing their decisions, it is difficult to see in what way such a feeble proposal as this would improve the present

state of things. When both parties are ready to submit their claims to arbitration, there is at present no difficulty whatever in finding arbitrators. It is believed, however, that the Bill may not even come to a Second Reading.

THE President of the Royal Academy will be fully represented this year. He is engaged on a number of very beautiful works, notably, a life-size head of a beautiful girl, seen in profile, looking upwards with an earnest expression, and distinguished by noble features, admirably drawn and modelled. Another picture is of an English girl with golden hair flowing over her shoulders. "Lacrine" is the present title of a larger picture, which may be taken as a type of grief, and represents a Greek maiden near a pedestal. Her face is somewhat downcast; one of her hands hangs at her side, while the other is placed upon the abacus of the pedestal. She wears a pale, ashy-blue robe over a much darker blue tunic. She has brought a cup for libation to the manes of the dead, and a withered wreath lies near her feet. Yet another is a life-size figure of a Greek lady, wearing a yellowish saffron or amber coloured dress, and seated upon a large chair covered with grey skins, over the back of which she has cast her finely formed and rounded arm, while she rests in stately ease. "Flaming Summer," another whole-length figure of a maiden in a Greek dress. Her head has fallen upon her breast, and her arms are folded in her lap. The figure is foreshortened from her feet, and her face, somewhat flushed in sleep, is half enclosed by the pale rosy orange tissue of which her dress is formed.

It appears to be an extremely easy thing for persons to become undignified, and to cast their good reputations to the four winds of heaven on the first possible occasion. Anything more monstrous than the attempt of the Imperial Institute big-wigs to wriggle out of paying their rates we have not heard for a long time. The Imperial Institute was founded for a great purpose. The Governors have obtained the land practically in perpetuity from the Commissioners of the 1851 Exhibition, at a rent of £5 a year. The site is 5 acres, 2 roods, 26 perches in area, and on it buildings costing £314,000 have been erected. The endowment fund at present stands at £140,000, and there are 8,000 Fellows who pay a respectable yearly subscription. At the final hearing of the case, Sir Peter Edlin very wisely considered there was nothing to exempt the Institute from the ordinary law applying to public buildings, and which also included hospitals and charitable institutions of that sort. The rateable value has been fixed at £11,781.

A CURIOUS case is pending in the Queen's Bench Division, and is being further considered at the moment of our going to press. Messrs. Gant & Slatter, architects and surveyors, of Hastings, have had a little difference with a Frenchman "who also lived at Hastings and owned property there." Mr. Lacroix desired two or three rooms added to his house, and the plaintiffs were employed as architects. A County Court action arose and was settled, Messrs. Gant & Slatter taking £55 in discharge of their claim. Now comes the further grievance. Plaintiffs allege that the defendant continued to write insultingly, and on an odd occasion actually assaulted one of them in the street! The principal thing complained of by the plaintiffs was a statement which they said accused them of having made use of a false receipt for £2 16s. 6d. in reference to goods supplied in connection with fire-places. The present action was for damages for libel and for an injunction to restrain the defendant from continuing to publish the statements com-

plained of. Mr. Gant and Mr. Lacroix vied with each other to amuse the Court, and, ultimately, Mr. Justice Hawkins adjourned until yesterday so that Mr. Lacroix might finish his impassioned and somewhat unintelligible address to the Jury.

OYEZ! OYEZ! OYEZ!

LISTEN all ye who labour, to the words of G. Bernard Shaw, who, in adding his testimony to Dr. Parker's forecast of the "Socialism in the Twentieth Century" in *Great Thoughts*, thus delivers himself:

IF YOU ARE A WORKING MAN, in the Twentieth Century you will find that you will always be able to obtain steady employment from the Vestry, or the County Council, or the Corporation, or the Government, at a wage fixed, not by the competition of starving men for bread, but by public opinion (including your own opinion) as to what is sufficient to enable you to live and bring up your family as a decent citizen, in return for your eight hours' work a day. If you work for a private employer, he will have to treat you equally well, to prevent your leaving him and getting public employment.



COBHAM COLLEGE FIREPLACE.

Your children will be trained in Board Schools, which will turn them out better educated—both technically and generally—than the best paid skilled workman of the present century; and there will be plenty of scholarships to enable them to pursue their studies, and go up to the universities, if they have special talents fitting them to enter the learned professions. You will travel by rail when and where you please, as freely as you now walk along the roads; so that you can live in the country and work in the town. You will buy your bread and milk at the County Council bakery and dairy, just as you buy your stamps at the Government post office. You will pay your rent to the local authority; and it will include a constant supply of hot and cold water and electric light. And you will become entitled to an old-age pension, sufficient to save you from becoming a burden on your children, before you are sixty.

MR. A. LEACH, Assistant Charity Commissioner, has visited Northallerton, to inspect the site for the proposed new Grammar School at Northallerton, which he has approved of. The cost of the site is £500. It is proposed to extend the accommodation of the National Schools.

WOOD PAVEMENT.

IT is stated that Mr. Lewis Clement has devised a non-slipping wood paving of a simple and inexpensive character. It consists in preparing the wood blocks before they are laid, by boring a few holes in them and filling the holes in with a hard-setting substance, composed of crushed stone, bitumen, and Portland cement. The compound is cleared off level with the surface of the blocks, and when they are laid the roadway is covered with a series of rough spots, which arrest the foot of the horse in any condition of the weather, and prevent the animal from slipping.

SOCIETY MEETINGS.

Liverpool Engineering Society.—The tenth ordinary meeting of the session of the Liverpool Engineering Society, took place last week at the Royal Institution, Colquitt Street. Professor Hele-Shaw, presided, and a paper was read by Mr. D. B. Morison, M.I.Mech.E., entitled "Experiments in Connection with Evaporation." The paper was much appreciated.

The Sanitary Institute.—A Sessional Meeting of the Institute will be held at the Parkes Museum, to-morrow, March 13th, at 8 p.m., when a discussion will be opened on "Back-to-Back Houses," by Mr. James Niven, M.B., M.A., Medical Officer of Health, Manchester, with illustrations of various types of back-to-back houses met with in practice, and the methods adopted for dealing with this class of property by Mr. Thomas De Courcy Meade, M.Inst.C.E., City Surveyor, Manchester. The chair will be taken by Sir Francis Sharp Powell, Bart., M.P. (Vice-President). Tickets for the admission of visitors may be had on application to the Secretary.

The Institute of Builders.—The annual general meeting of this Institute was held at the Offices in Bedford Street, Strand, London, on the 5th instant, when the election of officers for the ensuing year took place. Mr. Robert Neill, Jun., J.P., presided. The Secretary, Mr. R. S. Henshaw, read the audited account. The Council having decided to oppose The London Streets and Buildings Bill promoted by the London County Council, it was considered advisable that the Institute should act in concert with the Central Association of Master Builders. A long report was circulated among the members previous to the meeting, bearing upon the subject.

The Institution of Civil Engineers.—At an ordinary meeting of this Institution held on the 5th inst., two papers were read which dealt with the Transmission of Power by Electricity. One on "Water Power applied by Electricity to Gold Dredging," was by Mr. Robert Hay, M.Inst.C.E., and the other by Mr. Robert Robertson, on "Electrical Haulage at Earmock Colliery."

The Edinburgh Architectural Association.—The members of this Association recently paid a visit to the New Royal Observatory, on Blackford Hill, where the President, who is also the architect of the building, gave them a short description of the principal features of the buildings, which include the Observatory proper, the Astronomer Royal's house, houses for the assistants, and a lodge for the mechanic with stabling accommodation.

Society of Engineers.—At a meeting of the Society of Engineers, held at the Westminster Palace Hotel, Westminster, Mr. William George Peirce, president, in the chair, a paper was read by Messrs. W. Workby Beaumont, M.Inst.C.E., and Stephen Sellon, A.M.I.C.E., on "Parliamentary Procedure as affecting Light Railways and Tramways."

A. A. Camera Club.—At the last meeting of the A. A. Camera Club, held at 56, Great Marlborough Street, W., on March 4th, a most interesting lecture was given by Mr. Arnold B. Mitchell, F.R.I.B.A., on "Vaulting." The lecturer traced the development of the vaulted roof in England step by step, and illustrated his remarks by many excellent lantern views.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

THE EDITOR does not hold himself responsible for the opinions of Correspondents, whose communications should be brief and plainly written on one side of the paper.

The BUILDERS' JOURNAL goes to press on Monday at 6 p.m. All matter must reach the Editor by the first post on Friday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments. Subscribers in London or the Suburbs receive their copies by the first post delivery on the day of publication.

Advertising.

CHARGES FOR ADVERTISEMENTS.

SITUATIONS WANTED.

Per line (about 10 words), Sixpence.

Minimum charge, Eighteenpence.

Three Insertions for the price of Two.

SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS, TRADE AND GENERAL ADVERTISEMENTS.

Four lines (about 40 words), Three Shillings.

Each additional line, Sixpence.

Prepayment in the above Advertisements is absolutely necessary.

The charge for Paragraph Advertisements on the Front Page is Fifteen Shillings an inch, single column. Minimum charge, Five Shillings. Paragraph Advertisements on ordinary page, single column, Seven Shillings and Sixpence per inch.

MANUFACTURERS' ANNOUNCEMENTS ON ORDINARY PAGES.

Per Page, Single Insertion, Eight Guineas.

Discounts for series on application to the Manager, who will make Special Contracts for Announcements on Back and Leader Pages and positions facing matter.

NOTICE.—Advertisements for current week's issue are received up to last post on Saturday. Alterations in standing Advertisements must be made before 6 p.m. on Fridays.

Advertisers in THE BUILDERS' JOURNAL may have their replies addressed to the Manager's Office, free of charge, and may have them forwarded if addressed envelopes sufficiently stamped are sent.

Reading Cases, lettered in gold, may be had from the Manager. Price, One Shilling.

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

A *Times* correspondent states that the Egyptian Government has received 88 designs for the new Cairo Museum building, of which 28 were from Italy, four were local, and the remainder were from America and European countries other than Italy.

THE new cable which has recently been laid across the Atlantic weighs six hundred and fifty pounds to the mile. This is the biggest of all the cables. Although this latest one is larger than the others, the fashion of making cables has not changed since 1851. More than twelve million pounds are now invested in Atlantic cables.

The Builders' Journal.

MEN WHO BUILD.

No. 5.

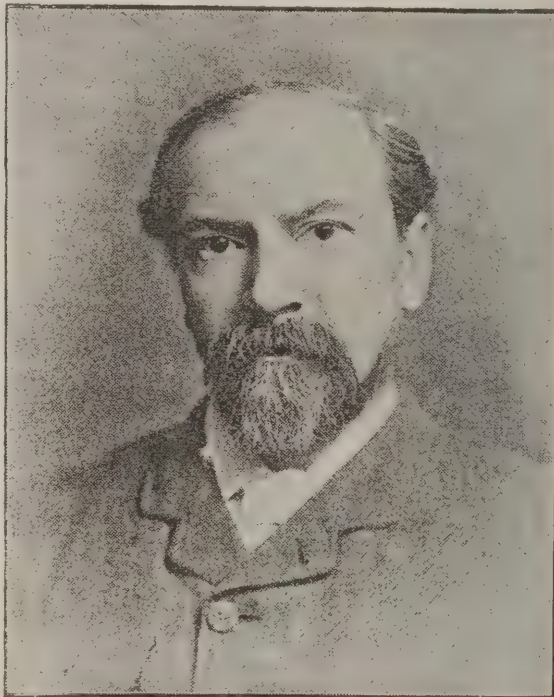
Mr. JOHN MCKEAN BRYDON.



SOMEONE has said—you don't know when or where—that architects are a sullen lot. The author of the remark had never met John Brydon.

John McKean Brydon—he tucks himself away in Newman Street, a street which smacks of art and artists—started work more than a quarter of a century ago with Messrs. Hay, of Liverpool, with whom he spent the customary probationary period. Being on the upward grade he naturally went north from Liverpool, until reaching Edinburgh he stayed with Mr. David Bryce; and Glasgow, where he entered the offices of Mr. Campbell Douglas. Having well imbued himself with Scotch Baronial Art, he straightway turned his back upon his Highland Goddess and discovered that the broad road to success led south. London claimed him, and in the offices of Messrs. Nesfield and Shaw he got the one remaining influence which converted him into a passionate disciple of Wren and Inigo Jones. It is one of the curious anomalies of the study of architecture that a really good man invariably practices the style he had most disliked as a student. Perhaps it is that the moment of striking out finds him more independent in thought than he has hitherto been, and should the demands of his first commission draw him out of his own personal groove, the range of his conception gets expanded and he finds delight in that which he has previously avoided. You are writing these lines with the sea lapping the nose of

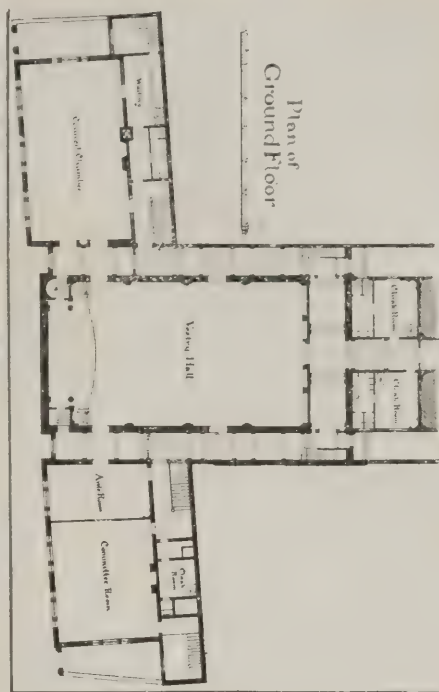
your little Yawl as it swings at anchor within a stone's pitch of the sandy beech. Above the Cliff stands a charming "hut" glaring in the redness of the morning sun. It is the one warm picturesque feature amid a cluster of the usual seaside houses, and it is as delightful in its internal arrangements as it is in its external aspect. And yet it is the work of a man who once fearlessly told you that red brick had been the curse of English architecture. Nothing has happened to that aspiring architect, but that he has changed his mind, his method and his style, and what was once hideous in his eyes now finds favour in his inmost heart. Almost as much may be said of the late Gilbert Scott, of George Street, of Charles Barry, and of many of the best living practitioners of the moment.



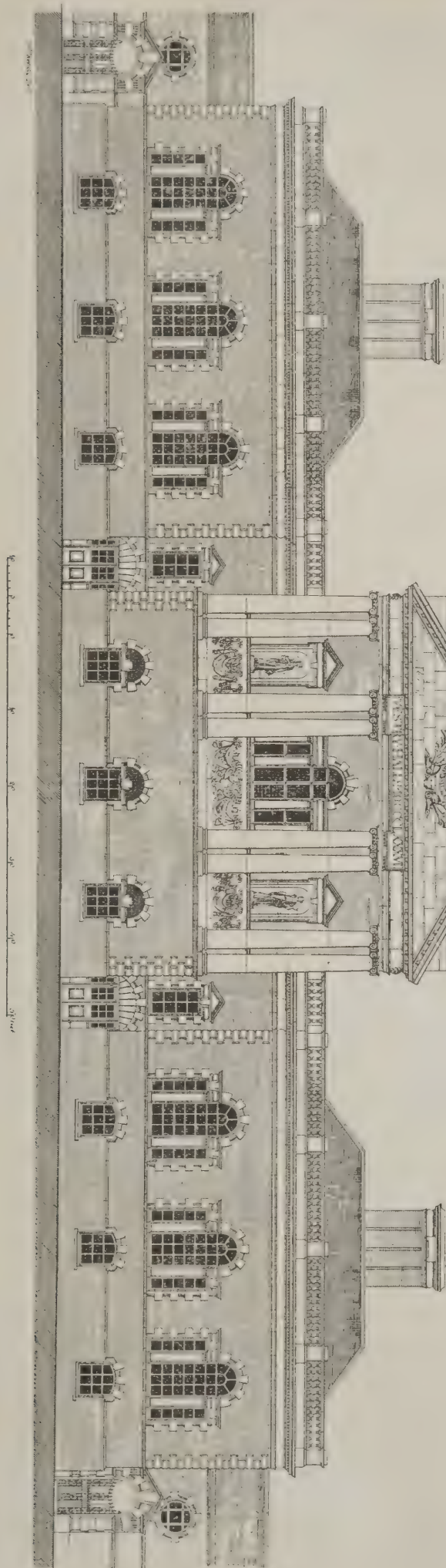
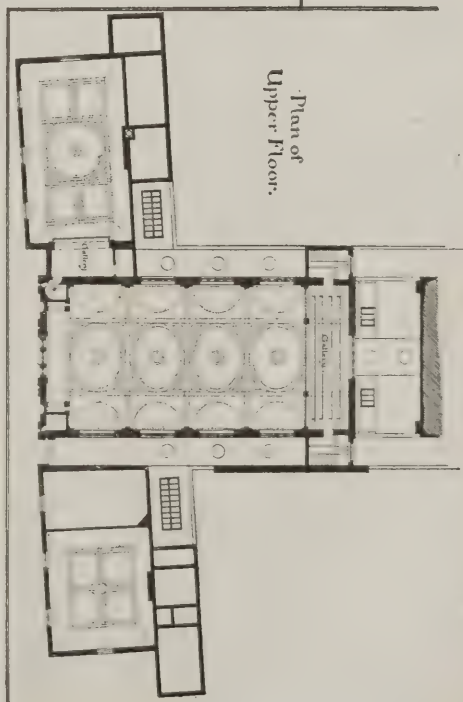
The early work of John Brydon consists of "Lewins," and its home farm in Kent; "Pickhurst," in Surrey; and additions to "Holmwood," for Lord Bramwell; and a



A VILLAGE CLUB—BY J. M. BRYDON.



CHELSEA VESTRY HALL.
J.M. Brydon, Architect.



house and studio in St. John's Wood for James Tissot, the French painter, for whom he is now reinstating and enlarging the Chateau at Buillon, the plans of which are upon his boards as you enter his sanctum. His later work consists of St. Peter's Hospital, in Henrietta Street, Covent Garden, opened by the late Duke of Albany, in 1882; the Ladies' Residential Chambers, in Chenies Street; and the fine New Hospital for Women, in the Euston Road, opened by the Princess of Wales last year. It was not until 1889 that Mr. Brydon got his first real chance to produce a public building after his own heart, and that he did after winning the open competition for the Chelsea Town Hall, which you are able to illustrate on another page. Then followed the Chelsea Library—which is also illustrated—and which is undoubtedly the finest public library of its kind in London. The circular entrance porch is a very fine piece of work, and the detail of the hall and staircase and of the Reference room on the first floor have been much admired. Also in limited competition, and also in Chelsea, Mr. Brydon gained the South West London Polytechnic Institution, which is now in course of erection on a site adjoining the Chelsea Free Library. In this particular district the hand of the builder seems already at the throat of great possibilities, and it would be more than gracious if Mr. Brydon were permitted to influence a little of the native architecture which is creeping, in a very debased condition, from Cadogan's monstrosities farther west.

The Village Hall at East Grinstead, which we illustrate—and which, at the moment, is lying devastated by fire—is an excellent sample of a kind of work John Brydon has done too little of. His practice has not been a "domestic" one; he has devoted himself more particularly to public buildings, the most pretentious of which is, perhaps, the Municipal Buildings and Technical Schools at Bath, which he gained in a limited competition and which is still building. At Bath also, he is engaged upon the additions to the "Spa," and on the much vexed question of restoring the old Roman Baths. A lot of hubbub has been raised over the latter work, but it may safely be left in the hands of so careful a man as John Brydon to develop itself as his veneration for the Romans may dictate. You are privileged to see the drawings for the work, and the very elaborate set of water-colour sketches and photographs made to assist the architect. The bases of the piers, which for centuries have surrounded the silent "pool," will be religiously preserved; the colonnade, which in a measure will be rebuilt, springing from bases set back from the original columns which supported the old Roman work. When all this is completed, it will still leave John Brydon without a work which is thoroughly representative of his fine talent. London can do with a great deal more of his solid style, his fine planning and his splendid detail. No one has ever found John Brydon aught else but refined in his designs, free from the fashionable absurdities of much modern work, and intense in his convictions that what is good is best. Before your visit to Newman Street had ended, a few instructive moments were devoted to the questions which were eating out the hearts of the fighting members of the Institute, but as Mr. Brydon is a prominent member of its Council, it would not be wise to detail the conclusions arrived at.

The wind has sheered round to the nor-east, and the "crew" of your privateer has notified his desire to sling out while the tide serves. So much, therefore, for Mr. John Brydon, a man of much charm of work and mind, without sullenness, and without much that has caused many good men to

fail. We are cast off from our moorings, and are heading, under a spanking breeze, for the Nore. We shall slew round off the coast-guard at Shoebury to send our M.S. to town, or thousands of readers in all parts of England will miss their "Men who Build," on Tuesday morning.

COTTON, CRAPE AND SILK PRINTING IN JAPAN.

A STRIKING feature in the Japanese materials is the elaborateness of the designs which are printed on even the cheapest of stuffs, the boldness of the design, its originality, its variety, and the intricacies and fierceness of the tints and colours, demonstrating at once that the result is not obtained from blocks and rollers. After silk damasks, crape is the favourite article affected by the Japs for dress. In this the weft is composed of threads which have been forcibly twisted either to the left or the right. The cloth is woven with two shuttles, two or four shots being given with the left twisted thread from one shuttle, and the same number with the right twisted thread from the other shuttle. On the removal of the fabric from the loom it is placed in a bath and boiled for some hours with straw ashes, and then washed, when it will be found to have shrunk very much, especially in its breadth. It is then stretched and rolled on a wooden cylinder, and dried in the sun. When finished it has an uneven surface, which it will always retain. From the weaver the material passes to the printer, who works in sheds open on three sides, and has rows of long narrow boards on trestles. On these are strained the cottons or other fabrics to be dyed, and to the rafters above are hung the boards on which the stuffs partly printed are drying before the completion of the process. Several men and boys are employed, and their sole materials are stencil plates, paints and brushes, the methods being much the same, no matter how elaborate the design. A stencil plate made of stout water-proof paper is temporarily fixed by means of brads to the cloth and board beneath, and with a spatula of bamboo, a paste of rice, and other materials, is spread rapidly and evenly over the surface of the plate. The paste passes on to the cloth through the patterned spaces of the stencil plate, and thus covers the portions it is intended to leave white in the design. The plate is then removed and the rice paste is permitted to dry. The workman then treats the entire piece of fabric in the same manner. A series of stencil plates are then used in succession, in order to draw in the outlines and put in the colours and shades of the design. Thus one plate will give the outlines of one half of the birds and flowers, the rest of the outlines being completed by the next plate. With a third plate the brown tints of the birds' wings are put in, with a fourth their beaks and claws, with a fifth any other colour of their plumage, with a sixth the pink shades of the plum blossoms, with a seventh the green leaves, and so on, the number of the stencil plates being only limited by the complication of the design and by the variety of the colours and tints in it. The colours are laid on moist with flat round brushes, rather stumpy. The depth, tone and shading of the colours depend on the taste and skill of the workman, and the designs, no matter how complicated, are executed in a very rapid manner, and soon the long strip of material is covered with birds, flowers, fans and other ornamentation, the base being left white. If it is desired to dye it blue, the parts which have been already printed are covered with a thin layer of rice paste. When dry the entire surface of the material is brushed over with a paste of indigo and rice, or it is dipped into the indigo

vat. The fabric is then steamed to fix the colours by the mordants with which they are mixed, and finally the rice paste is washed off, when the design of birds, fans, plum blossoms, flowers, and what else, on a blue ground will be found as clear and distinct as if just drawn with the brush, the simplest as well as the most elaborate designs going through precisely the same processes, and such a method permits of the greatest elaboration. Some very beautiful effects are obtained by painting, and often the material passes from the stencil printer to the painter, who, with a small brush, puts in tints or markings on wings, or feathers, or flowers, shading and combining colours with rare skill, and with an intuitive perception of the beautiful in tones. Many of the more artistic designs on silk crape, in which one may search in vain for the repeat pattern or diaper design, are painted entirely by hand. Touches of silk embroidering sometimes enrich and give point to the dainty designs of the ficus and ovis worn by Japanese ladies. In all crape printing factories there is an artist employed who sketches in black and white the new designs for which stencil plates are to be cut. The artist squats on the ground, and with clear rapid strokes of the brush, with nothing before him, he draws design after design of birds, fruit, flowers, animals, and all else beside, in combinations ever new but ever old, and invariably pleasing and artistic. Silks and satins are printed in the same manner as cottons and crapes, and in some of the factories in which the best class of work is executed, the combination of stencil printing, painting, and embroidery produces triangles of textile art unmatched in the world for beauty and for skilful manipulation. Velvet is also printed so as to produce pictorial effects, the pile being cut only just sufficiently to enhance the design. Sometimes the results are extremely good, and these printed velvets are framed and hung up as pictures by Western buyers. Plain-coloured stuffs are so little employed in Japan that vat dyeing, save in the case of indigo, is very little practised, but to meet the wants of foreign visitors, crapes and silks are now more frequently dyed in plain colours than formerly, and, unfortunately, aniline dyes are gradually displacing the old vegetable dyes of the Japs. Indigo obtained from the *Persicaria*, purple from the store crop called *Shikon*, green from the flowers of the *Saphora Japonica*, black from tannate of iron, and others from turmeric, Brazil wood, madder, safflowers, mulberry, pomegranate, and the peach tree are some of the sources whence the Japanese obtain their dyes. A favourite method of pattern dyeing is by knotting. Points of the crape are pinched up with forceps, and a thread is tightly wound round their base, the cloth, covered closely with these knots, either in rows or in some pattern, is dyed. When dry the thread is unwound and the cloth spread out, when it is found to be covered with irregular rings and dots. Coming to the wages, the ordinary workman in the printing and dyeing factories are paid from 5 to 10 yen a month—which is from 4s. 3d. to 8s. 6d. a week, inclusive of Sundays—for a day's work of from 10 to 11 hours. The designers and artists have 75 sen, or 2s. 6d. a day. Apprentices are taken at ten years of age for five years, and are boarded and clothed, and are given a little pocket-money on the two holidays per month to which they are entitled where Sunday labour is enforced. It were well if Japanese cotton and crape prints were introduced into England, and as they can be sold at about the same price as English hand block-printed goods, we should like to see their use extended in this country. For decorative purposes alone a great future would be theirs.

PLUMBING.

MR. PETER FYFE, Glasgow's Sanitary Inspector, has been lecturing the municipal magnates of his city on the future plumber work, referring to the responsible nature of the duties the practical plumber had to perform. He found, he said, that in greater Glasgow there were 239 master plumbers, employing 1,151 journeymen and 239 apprentices. Of the masters, 115 undertook steam and hot-water heating, 124 confined themselves to plumbing pure and simple, and 200 were prepared to assist in the distribution of water in the city at a pressure of 1,000 lbs. to the square inch. All recognised the fact that since the plumber came to add the extraction of sewage from the home to his first duty of supplying pure

obtaining heat and power in large cities' predicting that in 1945 Glasgow would warm herself, cook her food, and drive her motors by very different methods than those employed just now, and in these, he was convinced, the future plumber should have a predominant share. In New York in 1882 works were established to supply steam at a pressure of 80 lbs. per square inch to the citizens from central stations. Two main stations had been erected by the New York Steam Company capable of supplying high-pressure steam up to 19,000 horse-power per hour. The main wrought-iron pipes from these stations extended through nearly eight miles of streets, yielding power to between 500 and 600 steam-engines, but principally heat to public and private buildings. For a continuous supply of one indicated horse-

steam for £14 12s. 6d. nightly, or per annum of 3,000 working hours for £4,387 10s. Out of this sum which might be obtained for the steam, what might be termed the pure loss was its equivalents in coal at 7s. a ton, which amounted to £1,213 12s. 6d. per annum, and the firemen's wages, which of course were at present lost. The power of these furnaces, if utilised with suitable machinery, was capable of supplying 562 arc lamps of 2,000 candle-power, which would light on the low-tension system 19 miles of streets. He considered further that the Corporation were in quite an exceptionally good position for trying the power and usefulness of steam for heating and cooking in a few selected buildings near to any of their works, either in tenements belonging to themselves, or by special arrangement in the property of



CENTRAL LIBRARY, CHELSEA—J. M. BRYDON, ARCHITECT.

water, he jumped from being a tradesman yielding comfort and convenience into the position of a health protector or a health destroyer. He knew from experience in his official position that lives were yearly undermined and cut off through inefficient workmanship in pipes and drains. They would therefore all agree with him that no individual should be entrusted with the conception and construction of work who could not give evidence of a full knowledge of its principles and practice. Therefore the necessity for a State-protected register of the men who were accounted fit to fulfil the law. Not till then would the modern plumber be regarded as the trusted friend of every household instead of its deadly and most troublesome foe. Mr. Fyfe afterwards spoke of the possibility of the introduction of more rational methods of power per hour a charge of about 3d. per

hour was made, which for a working period of 3,000 hours during the year amounted to £9 7s. 6d. Small users paid more, viz., £12 10s., and large users paid less, or £7 10s. In Glasgow these charges would be greatly reduced, as both our fuel and our labour are much cheaper. Coming to the cost of heating, he found the charge was about 9s. 6d. for each 1,000 cubic feet of space heated during 182 days of the cold season at 24 hours per day. He estimated that at two-thirds of this cost the same thing could be made to pay handsomely in Glasgow. In connection with our refuse despatch works, the cleansing committee consumed in the furnaces of the destructors 94 tons of what was technically known as "soft core." He had found by experiment that the committee were in this way parting with a commodity they might be able to sell in the form of

private proprietors. Mr. Fyfe then proceeded to describe a system in operation in Paris for the transmission of compressed air from central stations, and showed its sanitary advantages as a motive power in factories, workshops and shops.

LAST week at the Wrexham County Court his Honour, Sir Horatio Lloyd, gave judgment in the case of the Ruabon Brick and Terra Cotta Company v. William Brown. The defendant is a builder at Chester, and the contractor for the erection of the new Fever Hospital at Rhyl. Among the materials ordered by him for the purpose of carrying out the contract from the plaintiff company, were a number of French grey enamel angle bricks, which the defendant maintained were not made in accordance with his instructions, and hence he refused to pay for them.—His Honour gave judgment for the plaintiff company for the full amount claimed.

JEAN FRANCOIS MILLET.

The Peasant Painter of Barbizon.

By ARTHUR O'NEIL.

Concluded from page 62.

He is already suffering agonies, but nevertheless he works and consecrates to us some of the finest of his masterpieces. Here is a characteristic letter in that sorry time: "The weather is dark and rainy, the sky cloudy and low, but you know I like it better than the sunlight. All is of a rich and melancholy colour which leaves my eyes quiet and my head calm. At Fontainebleau, I saw again Rosso and Primaticcio. They are strong fellows. They are of the decadence, it is true the fixings of their figures are often absurd and in doubtful taste, but what a strength of conception! And how strongly this rude *bonhomme* reminds one of a primitive age! It is as child-like as a fairy-tale, and as real as the *bonhomme* of old times. In their art there is a reminiscence of Launcelot and Amadis de Gaul, and the seed of Ariosto, Tasso, and Perrault. One could spend hours before those good-natured giants." And to quote again, here is a passage from his counsel to his friend Sensier, which may be usefully recommended to the critics of to-day. Sensier has been commissioned to write a series of articles on the Salon of 1865. Millet writes to him in these terms, in congratulating him on his happy task: "It seems to me you might show—going back somewhat—that Art began to decline from the moment the Artist did not lean, directly and naively upon impressions made by nature; that cleverness naturally and rapidly took the place of nature, and decadence then began. Strength departs without constant relation with nature, and as example the fable of Antæus could be used, whose powers diminished when his foot did not touch the ground, and on the contrary took new vigour every time he could touch it. . . . Show that, for the same reason—the abandoning of nature—art becomes more and more weakened. Give as many examples as possible. Once again, I am sorry we cannot talk it over. I send . . . some extracts, in which you can find some good quotations, or else take the substance of them—Montaigne, Palissy, Piccolpassi, and his translator, Claudius Popelyn. I will try to find others. I will ruminate upon it, and say as best I can what comes into my head. At the bottom it always comes to this: 'A man must be touched himself in order to touch others, and all that is done from theory, however clever, can never attain this end, for it is impossible that it should have the breath of life.'"

With one more extract I shall propose to begin to draw my friendly task to a close. What should be the dominant thought in all art creations? This is Millet's view, written in February, 1873, to M. Camille Lemonnier, a Belgian writer, who had early discovered the Barbizon painter's transcendent merits:—"I am very much flattered," he says, "by your letter, and thank you for making me acquainted with your work as art critic. The most enviable reward of those who try to do their best, is to excite the sympathy of intelligent men. This is equivalent to saying that I am happy to have been the occasion of your expressing certain truths of art. Only, you say of me things, which I consider to be so desirable, that I dare not believe myself possessed of them. It is not that I would doubt your judgment, but I distrust myself. But let me put myself aside quickly, that I may say (without stumbling over my own toes) that I must give you great praise for considering things from their fundamental side. It is the only true solid side. Many people, far from taking this point of view, seem to think that art is only a sort of show of professional ability. You understand that the Artist must have a high and definite aim. Without it, how can he make efforts to reach a point of which he does not even suspect the existence? How can a dog pursue game which he cannot scent? It depends, therefore, upon his aim, and the way in which he has reached it, that an Artist is of interest." Bear with me a moment more, if I trouble you with one only further testimony to the fervid heart, which has long since palpitated its last. It is the tribute of a Painter to a

Painter; it is Fromentin, who writes of Millet in the touching words, I am sure none here will consider of the nature of extravagant eulogy—"An original Painter of our own time, a lofty tone, a melancholy spirit, a good heart, a nature truly rustic, has said of the country and country people, of the severity, the melancholy, and the nobility of their work, things which no Dutchman would have ever dreamed of looking for. He said them in a language a little rude, and under forms where the thought has more clearness and vigour than the hand. We were deeply thankful for his tendencies; and in the French School of Painting, we saw in him the sensibilities of a Burns, less clever than the poet in making himself understood. After all, has he or has he not left beautiful pictures? Has his form, his language—I mean that exterior envelope without which the things of the mind cannot exist or last—has it the qualities to make him a beautiful painter, and to assume his future fame? He is a profound thinker compared with Paul Potter and de Cropp; he is a sympathetic dreamer compared with Terburg and Metsu; he has something incontestably noble when we think of the trivialities of Steen, Ostade and Branwer. As a man, he puts them all to the blush; as a painter, is he their equal?"

[FACTS ABOUT LONDON.]

MR. DAVID J. ROSS, the engineer to City Commissioners of Sewers, has reported on the works executed by his department during 1894. He mentions that 127 dangerous structures were reported upon and dealt with. The frontages of a number of houses in various streets were set back with a view to widening the thoroughfares. The whole of the premises on the south side of St. Paul's Churchyard, lying between Dean's Court and Paul's Chain, and extending back to Carter Lane, being about to be rebuilt, lines of frontage were arranged. Dean's Court is to be widened from 10 ft. to 22 ft. Plans were prepared showing the properties required to be taken in Upper and Lower Thames Streets, between St. Paul's Station and Tower Hill, to make the thoroughfare 35 ft. and 40 ft. respectively. These were submitted to the London County Council, who agreed to contribute one-third of the net cost of the improvement at the west end of Upper Thames Street provided the Commission would undertake the portion of the proposed northern approach to the Tower Bridge within the City, towards the cost of which portion the County Council were prepared to contribute one-half. The question of making an improvement at the western end of Cheapside had also, with three alternative lines, been submitted to the County Council, but no result had yet been arrived at. The electric lighting of the City was continued throughout the year. There were now 483 arc lamps in use. The total length of main thoroughfares lighted by arc lamps was about 13 miles. The number of gas lamps discontinued was 1,338. No fewer than 1,116,000 people and 92,000 vehicles entered the City daily, and 301,000 passed the entire day at work within the City—numbers which were not equalled, or even approached, by any other city in the world. The quantity of refuse removed had been 72,782 vanloads, or about 233 per day. All the rooms and shops at the artisan's dwellings, Petticoat Square, had been let, and the artesian well furnished an ample and continuous supply of water.

At a meeting of the Doncaster Rural Council on Saturday, it was resolved to apply to the Local Government Board to sanction a loan of £3,000 for the purpose of constructing a new sewer at Wheatley. The Council, on the recommendation of the committee, accepted the offer of the Rev. T. C. Taylor to sell land for sewerage works at Thurnscoe.

TROLLOPE'S "BLACK LIST."

IN the Court of Appeal on Wednesday, judgment was given by Lord Halsbury and Lords Justices Lindley and A. L. Smith in the case of Trollope & Sons v. London Building Trades Federation and others. The defendants, J. Vernon and others, appealed from an order of Mr. Justice Kekewich of February 8 last, by which he restrained them from circulating or issuing a document called "Trollope's Black List," which was a list of workmen who it was alleged were working in contravention of the rules of the union. Messrs. Trollope & Sons are the well-known builders, and a suspicion arose in 1894 on the part of some of their workmen that they were not acting up to the spirit of an agreement come to in 1892 between masters and men in the building trade, by which the masters agreed not to treat it as a disqualification that men seeking employment were trade unionists, and on the other hand the members of the trade union consented to work with men who were not members of the union. A letter was written by Vernon to Messrs. Trollope on October 24th last, calling their attention to the fact that for some time complaints have reached the federation that at certain of the plaintiffs' works union men had been refused work with the statement that only "free-labour men" would be engaged, and informing the plaintiffs that a deputation would wait upon them. The following day Mr. Trollope and Mr. Vernon had an interview, at which, it was alleged by the plaintiffs, Mr. Vernon demanded the dismissal of two of the foremen, on the ground that they had made a difference between non-union and union men, and threatened to call the men out if his demand was not complied with. Mr. Vernon, on the other hand, denied the threat to call the men out, and that he required the dismissal of the two foremen. A strike, however, commenced on the 1st of November, when 175 men left the works, though a considerable number remained. The places of those who had left were filled up, the works were picketed in the usual way, but the picketing not being successful, the pickets were withdrawn on January 14. A list was then prepared, called "Trollope's Black List," which contained the names of men who refused to comply with the regulations of their trade, and it was posted up in the offices of the different unions. Upon this plaintiffs moved before Mr. Justice Kekewich, who granted an injunction restraining the publication of the list. Lord Halsbury, in giving judgment, said that though the defendants might have a right to inform the union of the conduct of workmen, the mode they had chosen to do it by was in excess of the requirements. The defendants, moreover, admitted that they did not propose to further publish the circulars, but declined to give any undertaking. For these reasons the Court would not interfere with the decision of Mr. Justice Kekewich. Lords Justices Lindley and Smith concurred, and the appeal was dismissed with costs.

At the Port Sanitary and Hospitals Committee of the Liverpool Corporation there was read a letter from the Assistant Secretary, Local Government Board, with reference to the borrowing of £26,000 for extension of the City Hospital North, the consideration of which was postponed on the 31st January, 1895; also a letter from the Assistant Secretary, Local Government Board, enclosing sanction for borrowing of £26,000 for extension of this hospital; and the committee has adopted a resolution that the Council be recommended to place the sum of £25,000 at the disposal of the Port Sanitary and Hospitals Committee for the purpose of the extension of this hospital.

THE Church House has received an anonymous donation (from "A. B.") of £1,000.

ELECTRICITY FROM WATER POWER.

A GREAT amount of public interest has been aroused in the North of Scotland in connection with the formation of a British aluminium company to utilise the water power at the Falls of Foyers, on Loch Ness, which form one of the great attractions for tourists during the summer. It is proposed to bring the material from Ireland to Foyers, and there manufacture the metal with electricity as the motive power. The works will give employment to 100 men in a district where there is little or no population; and the buildings, the company state, will be of an ornamental character to harmonise with the beauty of the surroundings. Public feeling was somewhat

SAWDUST.

It is proposed by the Town Council of Leicester to borrow £1,600 for a new police station at Aylestone, and the matter has been referred to the Watch and Free Libraries Committees, to confer as to the desirability of providing for a branch free library in connection with the building. The Wesleyans have purchased sites on the Belgrave Road, at Clarendon Park, and at New Evington for the chapels and halls which it is proposed to erect.

In connection with the movement for the purchase of Carlyle's house in Chelsea, with the object of making it a place open to visitors, and of preserving Carlyle memorials, the committee, of which Mr. Leslie Stephen is chairman, has issued an appeal to the public for subscriptions. The price of the house is £1,750. A considerable sum has already been subscribed.

THE new chancel of Christ Church, Linthwaite, was on Saturday afternoon consecrated by the Bishop of Wakefield, and the church was re-opened after undergoing considerable alterations and improvements, which, together with the new chancel, have been carried out from designs and plans by Mr. C. Hodgson Fowler, of Durham. The cost of the addition and alterations, including a new organ, is about £2,500, towards which £1,600 had been raised.

THE Metropolitan Asylums Board has accepted the tender of Messrs. S. J. Jerrard & Sons, of 40, Loampit Vale, Lewisham, for fencing in with split-oak fencing, entrance gates, &c., the Park Hospital site, for the sum of £2,194; and the tender of Messrs. W. Johnson & Co., Limited, Wandsworth Common, for the erection of a boundary wall, with entrance gates, &c., around the Fountain Hospital site, at a cost of £2,770.



THE WICK VICARAGE. MR. ASTON WEBB, ARCHITECT.

allayed by an official statement, made at a meeting on Friday, to the effect that it is not proposed to do away with the falls, and that the flow of water will only be affected in very dry seasons. As tourists from all parts of the world visit the falls, the subject is one of national interest, and it is understood that the Secretary for Scotland has ordered an official report on the proposed operations of the company.

THE unit used in measuring the strength of electric currents was first called "an ampere" by the French Electric Congress of 1881, the name being given to it in honour of Andre Marie Ampere, the French scientist, who elucidated the theory that the magnetism of the earth is the result of electric currents circulating around it from east to west.

MR. George T. Sibbering, C.E., has prepared the estimates of capital expenditure required in the event of Parliament sanctioning the new works sought to be carried out under the powers contained in the Taff Vale Railway Bill of the present session. The total estimated expenditure is set down at £48,565, of which £46,090 is required for the proposed extension of the sea-wall on the south side of the sea entrance to the Penarth Dock Basin. The balance of £2,475 is for lengthening the bridge which carries the public road over the company's main line at Gelliwastad.

THE plans for a new church at Ardlin, Loch Lomond, have been approved by the Dumbarton Presbytery, the cost being, estimated at £500.

It has been estimated that it will require eighty-five men working every day until 1947 to unearth the entire ruins of Pompeii.

THE new Wesleyan Central Hall, which it is intended to build in Daniel Street, Ancoats, Manchester, will provide accommodation for 1,000 children on the ground floor, and in a hall above this will be accommodation for 1,000 adults. The cost will not be less than £7,000, towards which over £4,000 has been promised.

A VALUABLE collection of minerals, precious stones, and geological specimens has been bequeathed to the Derby Museum by the late Mr. J. A. Birds, of Bournemouth.

PLANS for a new market have been adopted by the Guildford Town Council, and will be submitted to the Local Government Board together with an application to borrow £8,000. The plans have been prepared by Mr. F. T. Maltby, the Borough Surveyor. Provision is made for widening Woodbridge Road to 40-ft., while an enclosed walk, 12 ft. wide, will run the whole length of the market.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in THE BUILDERS' JOURNAL, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

Sewer-Pipe Joints.—Messrs. J. & M. Craig, of Kilmarnock, are bringing out a new pipe, the rights of which they have purchased from the patentee, Mr. T. Fitzgerald. A most satisfactory test has lately taken place in Dublin in the premises of Messrs. Monsell, Mitchell & Co., 67 to 73, Townsend Street. The method of joining sewer-pipes exemplified in the new invention has been devised to overcome defects in the old system, which resulted not only in considerable trouble and expense to builders, but in many cases involved imperfect drainage and consequent liability on the part of householders to typhoid fever and other dangerous maladies. Messrs. Craig & Co., Kilmarnock, who are now manufacturing pipes with the new joints, have appointed Messrs. Monsell, Mitchell & Co., their sole agents for them in Dublin. The new joints, by an ingenious arrangement, insure in the connected pipes that perfect uniformity of bore which is essential for proper drainage, and the efforts to obtain which have hitherto invariably given such trouble to engineers, contractors and others. In addition to this they save a considerable amount of labour, enable the fitting of "gaskin" to be dispensed with, and require less than half the amount of cement that is necessary to join pipes in the ordinary way. Mr. D. Baird applied a hydraulic pressure of 100 lbs. to the square inch to the joints without discovering the slightest sign of leakage, and several architects, engineers and contractors examined the joints, and expressed themselves as being pleased beyond all expectations.

Electric Lighting.—The fine new printing works of the Geraldine Press, Limited, 21, Whitefriar Street, Fleet Street, E.C., and also the block of offices belonging to *Answers*, Limited, 24, Tudor Street, E.C., formerly lighted by gas, are now lighted throughout by electricity. Mr. E. R. Dolby, Assoc. M. Inst. C.E., of 8, Princes Street, Westminster, acted as consulting engineer for the proprietors. The current is produced in the basement of the works of the Geraldine Press, Limited, by a compound-wound direct-current dynamo, built by Messrs. Crompton & Co., and driven direct by an engine made by Messrs. Belliss & Co., of Birmingham. About 190 lamps have been installed in the works, and about eighty lamps in Tudor Street, and the lighting of both premises is controlled from one switchboard fixed close to the dynamo. The large Hoe machine used for printing *Answers*, and also the Marinoni machines used for printing the large number of other papers published at the same offices are lighted up internally by incandescent lamps, which much facilitate work. The wiring of the buildings was carried out by the Electrical and General Engineering Co., of 86, Leadenhall Street, E.C., under the supervision of the consulting engineer.

Oates & Green, of Halifax.—This firm send us their illustrated catalogue, for the current month, of their sanitary specialties, builders' requisites, refractory materials—fire, pot and setting clays, fire bricks and covers—and farm and stable fittings, which latter call for special attention. The illustrations are

splendidly and accurately drawn, and are just what catalogue illustrations should be. Messrs. Oates & Green have a long-standing reputation for turning out good work, and their prices, as stated in their catalogue, are quite reasonable.

Cooper's Suction Pump.—Mr. A. P. Cooper called at this office to elicit our interest in his suction pump, which "forces" stopped up drains, sinks, and water closets, by drawing out the obstruction instead of forcing it through. For instance, the inventor produced a rusty french nail about 7 inches in length, which he had drawn out of a lavatory waste. After performing on the floor cloth in our reception room, and succeeding in damaging it to a value of half-a-crown, he invited us to see his pump in action on our own lavatory arrangements, but we declared ourselves perfectly satisfied with the pump, which is very reasonable in cost.

Lift Brakes.—It ought to be widely known that Messrs. Easton, Anderson & Co., Limited, of London and Erith, sell a safety attachment that prevents any make of elevator from "running away" with itself, from any untoward accident to the pipes or chains.

Whitfield & Co.—Messrs. Whitfield, of Birmingham and London, send us their illustrated and priced catalogues of safes, strong room doors, and other contrivances to defeat the ravages of fire and the burglar. The best we can say of this well-known firm is that we have ourselves placed two orders with them.

CURRENT PRICES.

TIMBER.

K H B	4 x 11 Yellow	per Standard	£18 0 0
D M	4 x 11	"	10 15 0
H A B	4 x 9	"	13 10 0
K H B	3 x 11	"	18 0 0
E F	3 x 11	"	17 10 0
I	3 x 11	"	8 10 0
D M	3 x 11	"	15 10 0
H H H	3 x 9	"	13 5 0
D D D	3 x 9	"	9 0 0
**	3 x 9	"	4 0 0
* K *	3 x 9	"	12 15 0
K H B	3 x 7	"	6 15 0
** U **	3 x 7	"	8 15 0
R F O	2 1/2 x 7	"	8 7 6
O B B O L A	2 1/2 x 7	"	7 0 0
J A E	2 x 8	"	7 0 0
G E F L E	2 x 4	"	9 0 0
* P *	3 x 11 White	"	8 2 6
S V * V I K	1 1/2 x 6 1/2 Yellow	per Square	0 17 0
H B B	1 x 6 1/2	"	0 14 6
S & W	1 x 7	"	0 9 0
Sequoia, 3" & 4" x 14/20"	"	per foot cube	0 2 0
Pitch Pine, Prime, 3 x 11	"	per Standard	11 0 0
" "	2 x 11	"	10 10 0
" "	Choice 1 x 11	"	12 0 0
" "	Prime 1 x 6	per Square	0 12 0
" "	Fresh Saw 16/18"	per load	50/-
" "	" "	" "	45/-
" "	" "	" "	48/-
" "	" "	" "	43/-
Honduras Mahogany	"	per foot super.	3d. to 6d.
Panama	"	"	2d. to 5d.
Tabasco	"	"	3d. to 5d.
Mexican	"	"	2 1/2d. to 3 1/2d.
African	"	"	2 1/2d. to 5d.
Cuba	"	"	3 1/2d. to 9d.
" Cedar	"	"	3d. to 5d.
Mexican	"	"	3d. to 3 1/2d.
Prime Hewn Oak Logs...	"	per load	85/-
Birch Putlogs	"	per doz.	4/6

METALS.

Iron—Cleveland Pig	per ton	34s. 6d. to 34s. 9d.
" Hematite	"	41s. 9d. to 41s. 11d.
" Scotch Bar	per ton	£5 5s.
" Best	"	£5 12s. 6d.
" Extra Best	"	£6 7s. 6d.
Yellow Metal Sheets	per lb.	4 1/2d. to 4 3/4d.
Copper—British, Best Selected	per ton	£42 5s. to £42 15s.
Sheets, Strong	per ton	£50
Australian Fine	per ton	£43 10s. to £44 10s.
Lead—Pig	"	£9 10s. to £9 11s. 3d.
" Sheet, English	"	£10 12s. 6d. to £10 15s.
Tin—English Ingots	per ton	£64 10s. to £65.
Australian	per ton	£60 7s. 6d. to £60 17s. 6d.
Straits	"	£60 5s. to £60 15s.
Banca	"	£61 10s. to £62
Zinc—Sheet	per ton	£18 5s.

THE Office of Works has included in its estimates a sum of £1,000 for the partial renewing of the heating apparatus in the palm house, Kew Gardens. The total length of hot-water pipes in the palm house has been estimated at 22,600 feet, or about 4 1/4 miles. Notwithstanding, it has always been difficult to maintain a satisfactory temperature in the north wing during winter.

It is proposed to enlarge St. Michael's Church, Boldmere, Sutton, at a cost of £25,000.

THE GLASGOW THEATRE FIRE.

THEATRE fires have been numerous of late, and now the Glasgow Theatre Royal—one of Mr. Phipps' buildings—is in ruins. Fifteen years ago it was erected on the site of another theatre burnt down. The recent fire has resulted in the complete destruction of the auditorium and stage, and practical constructors will be interested to note the present state of the concrete floors in the



THE CORRIDOR.

corridors; these, constructed without iron joists, came down in large sections when anything fell upon them. The fire brigade complain of this startling unreliability, while the iron columns supporting the tiers held out very well; even the masonry which was not as much injured as might have been expected. The building is to be re-erected at once, Mr. Phipps again holding the commission.

THE Links and Parks Committee of Aberdeen Town Council has agreed to recommend that the erection of a bathing station at the beach be immediately proceeded with, and that the plans of the pavilion submitted by Mr. Rust, city architect, be adopted. The estimated cost is £3,000.

MR. LITTLEWOOD, of Sheffield, has recently contributed £3,000 towards the erection of new school premises in connection with Scotland Street Chapel in that town.

MR. GEORGE HARLEY, of Liverpool, is stated to have invented a method of manufacturing malleable iron without the process of annealing. The results obtained are surprising. Some Bessemer rails manufactured by this process were tested and found to be without a flaw.

AN application has been made to the Local Government Board by the Leeds Corporation for sanction to borrow an additional £100,000 for the purposes of the Town Hall, recreation grounds, and police stations.

A SPECIAL meeting of the trustees of the Manchester Royal Infirmary, Dispensary, and Lunatic Hospital or Asylum, has been held for the purpose of considering the desirability of enlarging the Manchester Royal Infirmary.

A NEW infirmary is about to be erected at Paisley at a cost of between £60,000 and £70,000. The plans have been prepared by Mr. T. Graham, Abercrombie.

A PLOT of waste land in Thurlow Street, Liverpool, the property of the Insanitary Property Committee, is to be acquired by the Parks, Gardens and Improvement Committee of the Council, and converted into pleasure grounds, at a cost of £550.

AT the annual meeting of the subscribers to Paisley Infirmary, it was stated that a sum of between £50,000 and £60,000 had been subscribed for the new Infirmary buildings.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

THE VENTILATION OF SEWERS.

To the Editor of "THE BUILDERS' JOURNAL."

The Briars, Selhurst,
March 8, 1895.

SIR,—A letter appeared in your issue of February 26 repeating the old suggestion that sewers should be ventilated by towers, with the implied addition of furnaces.

I think the following remarks may be interesting to the writer of that letter and to many of your readers.

They show, I think, once for all, the impracticability of ventilating ordinary town sewers by means of furnaces.

A furnace ventilating any large district would require to produce the movement of a very large volume of air, and to keep up a velocity sufficient to ventilate all the branch sewers, and the drag would consequently be so great through the main that it would force any house drain traps or water traps we could form, before it would influence the remote branches.

Supposing that the system of sewers consisted of tubes open at their extreme ends only,—instead of being more like flutes, as they really are, having openings in their sides,—that the whole of the air extracted was drawn from the sewers, that all the intermediate channels could be stopped, and that the foul air could be directed from the most remote ends of each of the sewers and distributed over those sewers with the most perfect theoretical accuracy, so as to have a uniform current passing through each of the sewers towards the tower, still the effect upon those would be *nil*; proved as follows:

Let the total area of say $6\frac{1}{2}$ miles of sewers connected with the tower equal 713 ft., and let the total area of the main sewer be say 8 ft.,—that is, about the 90th part of 713,—and suppose the air to be passing through this 8 ft. area at the rate of 542 ft. per minute, which may be called an average velocity; then if this be divided over the whole district, the velocity in all the sewers would be 6 ft. per minute, or 1-15th of a mile per hour. But air currents of velocities of 100 ft. per minute and upwards have been proved to exist in sewers from other causes, and 6 ft. per minute is practically stagnation and not ventilation.

While it is comparatively easy to conduct currents of air through the continuous galleries of a mine having but one or two inlets and a like number of outlets, and a pretty uniform sectional area, such a system cannot be applied to sewers. The areas of the branch sewers discharging into any one main sewer are, probably, much more than a hundred times its capacity; therefore, even supposing it were possible that they could all be hermetically sealed at all points, excepting the ends, a velocity of current equal to 100 miles an hour (which is next to impossible) would have to be obtained in order to secure a current of one mile per hour in each of the branch sewers. But it is not possible to obtain such a condition of things, and this difficulty lies at the root of all proposed modes of sewer ventilation, by extracting the foul gases by furnaces, fans, or such other appliances.

It should be added that friction would decrease the quantities of air mentioned above, to a very appreciable extent.

A main "outfall sewer," without intermediate connections, may be, and sometimes is, ventilated by means of a furnace. But whether this may be called an economical

method, seems more than doubtful, the cost of the fuel consumed being enormous.

The late Sir J. W. Bazalgette, C.B., in his report on this subject, addressed to the Metropolitan Board of Works in 1866, estimating the prime cost of 230 furnaces, chimneys, &c., for the London sewers, to be nearly half a million of money, to which would have to be added about £201,480 per annum for coke, without pricing labour or other incidental expenses. I am indebted to the late Sir J. W. Bazalgette, for many of the facts stated above.—I am, yours faithfully,
CHAS. E. GRITTON, A.M.Inst.C.E.

SAWDUST.

THE Lincoln City Council, on Tuesday night, decided after an animated discussion, to construct public baths, including two swimming baths, on the site on Brayford Wharf, recently purchased of Councillor Pacy, and to abandon the idea of forming a new road on the site, with one swimming bath.

THE tender of Messrs. Parker & Sharp, York, at £1,299, for carrying out the proposed sewerage scheme has been accepted.

WITH a view to induce the construction of better style of shops and fronts in England, the directors of the Confectioners' and Bakers' Annual Exhibition, which is held at the Royal Agricultural Hall, Islington, have decided to give £220 in prizes for specimen shops to be fitted at the hall during the next exhibition, from September 21st to 28th.

A WATCH has been invented which measures distance by sound. The inventor, a French officer named Thouvenin, has called the instrument a phonotelemeter. To operate it, a little button is pressed at the instant of the flash and again at the sound. In the meantime a needle traverses a dial, registering time to the one-tenth part of a second. The rest is a mere matter of calculation.

SIR CHRISTOPHER HAWKINS has presented the freehold of a site for the erection of a Board School at Mellador, in Devonshire. The site has been approved by the Education Department.

THE Liverpool School Board has finally adopted revised plans, prepared by Mr. C. E. Deacon, for the erection of new offices for the Board on a site between St. Thomas Street and Cumberland Street.

LORD PENRHYN has instructed Mr. Young, his chief agent, to add a day's pay to the wages of the 3,000 quarrymen in his employment at Penrhyn Slate Quarries, as an indication of his sympathy with them. This is the more remarkable because, unlike most other Welsh slate quarries, Lord Penrhyn's men have lost only five days' work during the past eight weeks of frost.

A STOCKHOLM correspondent states that of the two companions whom Herr Andrée intends to take with him on his proposed balloon expedition to the Pole, one is now decided upon. It is Dr. Nils Ekholm, meteorologist at the Meteorological Institute in Stockholm, who is a first-class expert in the meteorology of the Polar regions. He was the chief of the great physicometeorological expedition which passed the winter in Spitzbergen 1882-3, of which Herr Andrée also was a member, and in the scientific world he is known as one of the first meteorologists in Europe. Who is going to be the third member is not yet settled, but Herr Andrée has received so many offers from all sorts and conditions of men who want to go with him that he could fill, not only the gondola, but the whole balloon.

THE Board of Trade have approved of the Rhondda and Swansea Bay Railway, which will probably be opened on Monday. The line has taken 14 years to construct at a cost of £900,000.

A CAIRO telegram states that, at a Council of Ministers, under the presidency of the Khedive, it was decided to continue the railway from Keneh to Assouan. The concession for the construction of the line has been accorded, as before, to the Verschauer and

Seiarez group. The line will be 180 miles long, and it is to be finished in twenty-seven months. The Government guarantees the *concessionaires* 4 per cent. annually. The new railway will be of great importance strategically and commercially, and will also afford special facilities for tourists.

THE Harbour Board of Aberdeen has resolved to proceed with the extension of the shed on Provost Jamieson's Quay, and afterwards to widen Trinity and Regent Quays, and erect new sheds there, as recommended by Mr. Wake, C.E., Sunderland. After this work is completed a new steel swing bridge, with a double line of rails, will be constructed in place of the present Regent Bridge. The work will be carried out by instalments, and the total cost will be between £40,000 and £50,000. The Town Council have decided to construct an underground lavatory in Castle street, at a cost of £1,600, and to erect a urinal on the west side of Holburn street, at a cost of £95, and one at the south side of Victoria Bridge, at a cost of £160. The city chamberlain has been authorised to communicate with the Harbour Commissioners so as to ascertain the terms upon which they would feu the piece of ground adjoining the police stables at Poynerook road. The ground measures 1,497 square yards, and will be feued in view of an extension of the stables. It is proposed to put the lavatory in Maberley street into proper condition.

EXTENSIVE improvements have just been completed on the estate of Nenthorn, on the border-line of Roxburghshire and Berwickshire. A new mansion-house has been built (the architects being Messrs. Beattie and Sons, Edinburgh), and electric lighting and a new water supply have been introduced.

AN inquiry under the Housing of the Working Classes Act, 1890, has been held at the Council House, Birmingham, into the scheme of the Corporation for dealing with insanitary property in Milk Street and Little Ann Street. The area of the site is 4,030 square yards, and it is estimated that it will cost the Corporation £5,500 to acquire the property, while the value of the land, when the buildings have been pulled down, is put at £3,350. The Corporation do not propose to take any steps to secure the erection of workmen's dwellings in the place of those pulled down, as there is believed to be no lack of houses in the neighbourhood.

A PARTNERSHIP has been entered into between Mr. George Highton, F.R.I.B.A., diocesan surveyor of Bedford, and Mr. Arthur Ardrion, F.R.I.B.A., of 39, Victoria Street, Westminster. The united practices will be carried on at 39, Victoria Street, Westminster, as Highton & Ardrion, with a branch office at 5, The Crescent, Bedford.

MESSRS. DONALD & SIME having resigned their respective appointments as consulting engineer and works manager of Robert Boyle & Son, Limited, with whom they have been for over eleven and twelve years respectively, have commenced business as ventilating, heating and sanitary engineers.

SOME stained-glass windows have just been placed at the east end of Cononley Church. The principal subject is the Ascension of Our Lord, and the work has been executed, in the style of the 14th century, by Messrs. Powell Bros., of Park square, Leeds.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ALRESFORD.—For the erection of stable buildings at Langtons, Alresford, Hants, for Colonel H. Stratton Bates. Messrs. J. Colson and Son, F.F.R.I.B.A., architects, Winchester:—

Franklin, Portsmouth	£1,700	0	0
Stephens, Bastow and Co., Limited, Bristol	1,588	0	0
Humphreys, Winchester	1,490	0	0
Fieldier and Son, Winchester	1,380	0	0
Hutchings, Winchester	1,365	0	0
Green, Droxford	1,356	0	0
Eddolls, Alresford	1,339	0	0
Barnard Bros., Alresford	1,109	0	0
Hedges, Bishopstoke	1,012	0	0
Grace, Winchester	970	0	0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch PRESSED BRICKS

Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.

MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO
TILES MOSAIC
FAIENCE
Poole Dorset

BANGOR.—For Baptist Chapel at Glanadda, Bangor. Mr. R. Glynn Davies, architect, 220, High street, Bangor :—
CHAPEL HOUSE, SCHOOLROOM, &c.

Jones, H., and O. Owens, Bryn	...	...	...
Tirion, Llanberis	...	1,610	0 0
Griffiths, J., and O. Edwards, Tan-y-	...	...	...
Maes, Port Dinorwic	...	1,593	0 0
Jones, W., Bangor	...	1,473	0 0
Roberts, J., Bethel road, Carnarvon	...	1,445	0 0
Williams, R. and J., Upper Bangor	...	1,430	0 0
Williams, E., Garth, Bangor	...	1,292	0 0
Jones and Williams, Hiracl, Bangor	...	1,154	0 0
Owen, D., Glyn Garth Post Office,	...	...	...
Menai Bridge	...	1,088	0 0

CHAPEL AND SCHOOLROOM.

Williams, E.,	...	1,195	0 0
Jones and Williams	...	1,090	0 0
Owen, D. (accepted)	...	924	0 0

CAMBERLEY.—For house at Camberley, Surrey. Mr. A. E. Sidford, M.S.A., architect, Wokingham and Bracknell :—
Murrell, G., Blackwater ... 486 0 0
Spear and King, Crowthorne ... 839 0 0
May, W. J., Bracknell ... 764 0 0
Seward, J. B., Wokingham ... 760 0 0

DARTMOUTH.—For surface drainage works for the Corporation. Mr. T. O. Veale, Borough Surveyor. Quantities by Mr. Vincent Catermole Brown, Paignton :—
Sanders, W. H., and Son, Bourne-
mouth ... 1,812 0 0
Shaddock, W. C., Plymouth ... 1,793 0 0
Shaddock, J., Plymouth ... 1,620 0 0
Shaddock, T., Plymouth ... 1,542 0 0
Whetham, J. T., Weymouth ... 1,537 0 0
Fillar, R. C., Dartmouth ... 1,510 0 0
Ambrose and Welsh, Bath ... 1,474 0 0
Fike, E., Torquay ... 1,440 0 0
Bridgman, M., Paignton ... 1,267 10 0
Brenton, W., Torquay ... 1,249 0 0

EAST COWES.—For completion of well in brickwork and cast-iron cylinders, and for building an engine house, for the East Cowes Urban District Council. Messrs. Lemon and Blizard, Engineers, Castle lane, Southampton :—
Brown, W., and Son, Tottenham ... 1,550 15 0
Tilley and Sons, Walbrook ... 1,438 8 0
Bull, Northam, Southampton ... 947 0 0
Playfair and Toole, Northam* ... 942 0 0
* Accepted.

GORING.—For repairs, Coombe End, for Mr. J. Foster, Coombe Park. Mr. J. S. Dodd, architect, Reading :—
Goodall ... 531 13 5

HALIFAX.—For building Vicarage, Saville Park Road, in connection with St. Jude's. Messrs. Horsfall and Williams, architects, George street, Halifax.

(Accepted Tenders.)
Naylor, E., Gladstone-road, mason.
Holstead, A. & Son, West Parade, joiner.
Boocock, T., George-street, plumber.
Blackburn & Davenport, Hyde Park-road, slater and plasterer.

HEREFORD.—For taking down and rebuilding business premises, 146 and 147 Widemarsh street, Hereford. Mr. W. W. Robinson, 10, King-street, Hereford, architect :—
Beavan and Hodges ... 1,255 0 0
Bowers and Co. ... 1,162 0 0
Davies, J. (accepted) ... 1,160 0 0
All of Hereford.

LONDON.—For the erection of fencing, entrance gates, walls, &c., Park Hospital Estate, Hither Green, Lewisham for the Metropolitan Asylums Board. Mr. Edwin T. Hall, architect, 57, Moorgate street, E.C. :—

Mills	...	43,950	0 0
Wall and Co.	...	2,487	0 0
Adams	...	2,392	0 0
Cooke and Son	...	2,297	0 0
Foster and Dicksee	...	2,200	0 0
Jerrard and Sons, Lewisham (accepted)	...	2,194	0 0

LONDON.—For new warehouse in Great Prescott street, E. Mr. W. A. Longmore, architect :—
Sparks and Son ... 2,125 0 0
Evans, R. & E. ... 2,078 0 0
Wainman ... 1,770 0 0
Scott, S. J. ... 1,769 0 0
Gladding, W. (accepted) ... 1,720 0 0

MIDDLESBROUGH.—For additions to Denmark street Board school :—
Bastiman Bros. (accepted) ... 43,732 2 0

PARSON'S GREEN.—For alterations to "White Horse" public-house, Parson's Green, for Messrs. James and Son. Messrs. Crickmay and Sons, architects. Quantities by Raven and Crickmay :—
Gould and Brand ... 42,881 0 0
Lawrence, E., and Sons ... 2,230 0 0
Holloway Bros. ... 2,120 0 0
Gregory, T., & Co. ... 2,087 0 0
Anley, J. ... 2,080 0 0
Carmichael, J. ... 1,936 0 0
Patrick and Sons ... 1,934 0 0
Minter, F. G., Westminster (accepted) ... 1,900 0 0

RYDE.—For pulling down and erecting new public-house at Ryde, for Mr. Edward Sweetman. Mr. John L. Barton, architect and surveyor, Ryde :—

Langdon, C.	...	1,512	0 0
James, E.	...	1,498	0 0
Whitewood, J.	...	1,300	0 0
Barton, J., Ryde (accepted)	...	1,256	0 0

RAYLEIGH (Essex).—For the erection of villa-residence and stabling. Mr. James Thompson, architect, Chit Town road, Southend-on-Sea. Quantities by Messrs. Curtis and Sons :—

Baker and Hainsworth	...	45,475	13 6
Kimberley	...	4,139	0 0
Rayner	...	4,100	0 0
Stewart	...	4,091	0 0
West	...	4,047	0 0
Davis and Leaney	...	4,035	0 0
Baddock and Maxey	...	4,010	0 0
Brown, T.	...	3,975	0 0
Ortleur	...	3,858	0 0
White and Son	...	3,845	0 0
Girling and Coe	...	3,798	0 0
Berry	...	3,791	12 0
Norden	...	3,749	0 0
Brown, J.	...	3,619	0 0
Gozzett	...	3,450	0 0
Carter	...	3,389	0 0

SLEAFORD.—For sinking well, constructing brick tower, supply and fixing cast-iron reservoir, gas-engine and pumps, providing and laying about 3,100 yards of 4-inch, 3-inch and 2-inch cast-iron pipes, together with service valves, &c., required in the construction of Waterworks in the Parish of Heckington, for the Sleaford Rural District Council. Mr. Jesse Clare, surveyor :—

Hipwell, S.	...	1,700	0 0
Freeman, W. S.	...	1,700	0 0
Botterill, W. J.	...	1,650	0 0
Vickers, J. H.	...	1,618	0 0
Price, J. F.	...	1,595	0 0
Roberts, H.	...	1,590	0 0
Tilley, T., and Sons	...	1,518	13 0
Pattinson, S. F.	...	1,420	0 0
Shardlow, H.	...	1,390	0 0
Pickthall, J., and Son	...	1,370	0 0
Williams, G. H., Sleaford	...	1,330	0 0

SOUTHAMPTON.—For construction of a pile foundation and other works for the Mount Pleasant School Board, Bevois Valley, Southampton, for the School Board. Mr. John H. Blizard, architect, Lansdown House, Castle lane, Southampton :—

Stevens and Co., Northam	...	47,900	0 0
Daysh, Northam	...	9,880	0 0
Payne, A., Southampton	...	6,972	0 0
Playfair and Toole, Northam	...	6,847	0 0
Honeychurch and Co., Bevois Town	...	6,755	8 0
Crook and Batten, Bevois Town	...	6,697	7 0
Roe and Grace, Southampton	...	6,660	0 0
Osman, J., Four Posts-hill	...	6,584	0 0
Bull, H. W., Northam	...	6,484	0 0
Dyer and Son, Bevois-hill (accepted)	...	6,400	0 0
Architect's estimate	...	6,896	0 0

INTERNATIONAL BUILDING TRADES EXHIBITION,

THE SECOND OF A SERIES UNDER NEW MANAGEMENT,
WILL BE HELD AT THE

ROYAL AGRICULTURAL HALL, LONDON,

FROM MARCH 25 TO APRIL 4.

The Consultative Council, consisting of gentlemen of high repute in the Professional and Manufacturing World, are taking special interest in this Exhibition, for the purpose of securing the greater development of Trade in connection with the Building Industries.

CONSULTATIVE COUNCIL.

BANISTER FLETCHER, J.P., D.L., F.R.I.B.A., *Chairman.*

J. PARNELL ALLEN, P.A.S.I., Newcastle-on-Tyne.
CHAS. BARRY, F.S.A., F.R.I.B.A.
ERNEST BENEDICT, C.E., (*The Indian Engineer*).
T. BLASHILL, F.R.I.B.A., Architect to the London County Council.
T. CHATFIELD CLARKE, F.R.I.B.A.,
F. R. FARROW, F.R.I.B.A.
LEWIS H. ISAACS, F.R.I.B.A.
CHAS. LYNAM, F.R.I.B.A.
J. DOUGLASS MATHEWS, F.R.I.B.A., F.S.I.
EDMUND A. PONTIFEX, M.Inst.C.E., Master of the Armourers' and Braziers' Company.
JOHN E. SEARS, F.R.I.B.A.

E. J. KIBBLEWHITE, A.S.A. (*Editor of THE BUILDING NEWS*).
GILBERT WOOD, F.R.G.S. (*The Architect*).
JOHN MOLEM BURT (John Molem & Co.), Master of the Loriners' Company.
H. H. BARTLETT (Perry & Co.), Past President Institute of Builders.
T. FREEMAN, F.G.S., F.S.S., Warden Shipwrights' Company.
LAZENBY LIBERTY (Liberty & Co.), Master of Glass Sellers' Company.
THOS. MINTON, J.P. (Mintons, Limited).
H. GREVILLE MONTGOMERY (*The British Clay-worker and Potter*).

PEARSE MORRISON, Master of Blacksmiths' Company.
W. NISBET BLAIR, C.E., Borough Engineer and Surveyor, St. Pancras.
LEWIS ANGELL, C.E., Borough Engineer and Surveyor, West Ham.
ALFRED DARBYSHIRE, F.S.A., F.R.I.B.A., Manchester.
F. BENNETT SMITH, F.R.I.B.A., Manchester.
FREDK. T. PILKINGTON.
LATHAM A. WITHALL, F.R.I.B.A., F.S.I.
T. LOCKE WORTHINGTON, A.R.I.B.A., Assoc.San.Inst.

T. FREEMAN, Hon. Sec.

Full Particulars on Application to THE MANAGER, 222, STRAND, LONDON. W.C.

Telegrams—"BATIMENT, LONDON."

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD. W

SWANSEA.—For the erection of warehouse, at "Prince of Wales" Dock, for the Harbour Trustees. Mr. A. O. Schenk, engineer, Harbour Offices, Swansea:—

Jones, D. C., and Co. ...	£7,321	0	0
Wilson, J. ...	7,000	0	0
Lauton, J. H. S. ...	6,980	0	0
Dixon Bros. ...	6,903	0	0
Lissaman, W. ...	6,945	11	3
Jenkins, David ...	6,793	5	0
Page, E. H. ...	6,657	14	10
Weaver, J. and T. ...	6,650	11	0
Price and Wills ...	6,533	7	11
Williams, Wm. ...	6,480	4	9
Evans, Thos. ...	6,464	5	0
Wilkins, G. H. ...	6,441	13	5
Palmer, Geo. ...	6,318	13	4
Richards, Thos. ...	6,300	0	0
Bennett Bros. ...	6,290	5	5
Jones and Thornley ...	6,100	0	0
Gustavus Bros. ...	5,892	5	6
Watkins and Co., Thomas, Ltd. ...	5,869	13	6
Davies, G. ...	5,836	13	3
Williams, J. ...	5,572	9	9
Ridley, T. D., Royal Exchange, Middlesbrough* ...	5,474	5	6
Jay, George ...	4,906	0	0

* Accepted.

TONBRIDGE.—For the erection of the new Commercial School, in Brook street:—

Godfrey, J., and Co., London ...	£10,087	0	0
Grover and Son ...	9,669	0	0
Colls, B. E., and Son ...	9,661	0	0
Dove Bros. ...	9,625	0	0
Rider, T., and Son ...	9,603	0	0
Holloway Bros. ...	9,590	0	0
Steed, T. ...	9,290	0	0
Gallard, C., Southborough ...	9,084	0	0
Punnett, E., and Sons, Tonbridge ...	9,040	0	0
Strange and Sons, Tunbridge Wells ...	8,889	0	0
Wallis, G. E., and Sons, Maidstone ...	8,676	0	0
Turner, T., and Co. ...	8,637	0	0

WOODFORD.—For alterations to the Isolation Hospital, Woodbridge (Block D), for the Guildford, Godalming, and Woking Joint Hospital Board. Mr. Edward L. Lunn, Guildford, architect:—

Dolling and Co., Kingston ...	£1,599	0	0
May, P. C., Guildford ...	1,585	0	0
Mitchell Bros., Shalford (informal) ...	1,565	0	0
Kingerlee, T. H., Oxford ...	1,487	0	0
Bottrill, J., and Son, Reading ...	1,460	0	0
Butt, W. J., Woking ...	1,435	0	0
Tribe and Robinson, Guildford ...	1,431	0	0
Smith, W., and Sons ...	1,425	0	0
Smith, R. ...	1,409	0	0
Higlett and Hammond ...	1,398	0	0
Billimore, F. H. ...	1,362	13	0
Peters, P., Horsham (accepted) ...	1,300	0	0

[Architect's protecting estimate, £1,450.]

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.
SLATE MERCHANT,
SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

**Penrhyn-Bangor,
Oakeley-Palmerston,**

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

S. PONTIFEX & CO.,

**MANUFACTURING, SANITARY AND
VENTILATING ENGINEERS.**

**GALVANIZED IRON BINS FOR STORAGE OF
GRAVEL AND BALLAST AT ROADSIDE.**

Manhole Covers. Side Entrance Covers.

Circular Lamphole Covers.

Sewer Rods and Fittings. Sewer Trolleys.

Cast-Iron Flushing Boxes. Gully Grates.

Sewer Ventilators and Flushing Valves.

**CAST-IRON STANDPOSTS, STREET
HYDRANTS & DELIVERY HOSE.**

Cast and Enamelled Iron Name Plates.

Street Orderly Bins. Galvanized Wrought-Iron
Tanks, Cisterns, &c. Shovels, Picks, Pails.

Prompt Delivery at Lowest Market Prices.

Estimates on Application.

S. PONTIFEX & CO.,

22, COLEMAN ST., LONDON, E.C.



BLACKMAN VENTILATING COMPANY, LTD.,

Engineers and Specialists in
VENTILATING AND WARMING
 Public and Industrial Buildings, Schools, &c.
 20,000 INSTALLATIONS OF MECHANICAL VENTILATION IN SUCCESSFUL USE.
 63, FORE STREET, LONDON, E.C., AND BRANCHES.

DESIGNS, Drawings, Competitions, Perspectives, Tracings, Photoprints, Typewriting, Mounting, etc. Quantities, Estimates, Specifications. Finsbury Drawing Office, 113, Pavement, Moorgate, London, E.C. Established 1887.

Paint Mixing.—New Book.—1,000 practical Trade Recipes, Instructions for Mixing and using Paints, Oils, Colours. Illustrated with colours and tools. Free, 2s. J. TOMLIN, Queen's Road, Barnsley, Yorks.

French Polishing, Enamelling, Staining.—New Book. 1,000 practical Trade Recipes, Instructions. Beautifully illustrated. Free, 2s. J. TOMLIN, Queen's Road, Barnsley, Yorks.

Perspectives in Colour, Monochrome, or Pen and Ink.—Address: D. HOME, 45, Church Street, Stoke Newington, London, N.

Publishing in Parts as Ready.

THE QUANTITY SURVEYOR.

A full exposition in quarto of the most approved modern method, by CHAS. HENRY SEARLE.

Part 6 is now ready. Single Parts, price 1/8 each, forwarded post free by the Author, 16, SOUTHWARK STREET, LONDON, S.E.

APPOINTMENTS VACANT.

CITY OF MANCHESTER.

APPOINTMENT OF DRAINAGE INSPECTOR.
 The Paving and Highways Committee are prepared to receive APPLICATIONS for the above position, at a salary of 45s. per week.

Applicants must possess the Certificate of the Sanitary Institute. Applications, accompanied by copies of three recent testimonials (which will not be returned), to be forwarded to T. DE COURCY MEADE, City Surveyor, Town Hall, Manchester, not later than FRIDAY, the 15th MARCH, endorsed on the outside "Application for Drainage Inspector."

Canvassing, directly or indirectly, will disqualify.
 Town Hall, WM. HENRY TALBOT, Town Clerk.
 Manchester, February 27th, 1895.

DRAUGHTSMAN.—WANTED for a temporary engagement, a really efficient DRAUGHTSMAN capable of making working and detail drawings.—Apply, stating age, experience, and salary, to CHARLES SMITH & SON, Architects, Reading.

CLERK OF WORKS WANTED for Mid-lands. State experience and salary required.—Address ELY, 32, King Street West, Manchester.

WILLIAM H. THORP, F.R.I.B.A., No. 61, Albion Street, Leeds, has a VACANCY for an ASSISTANT. Preference given to a draughtsman who has been trained in a good office, and is accustomed to high-class work.—Apply by letter, stating age, qualifications, and salary required.

APPOINTMENTS WANTED.

ARCHITECT'S experienced leading ASSISTANT (27) desires ENGAGEMENT, with possibility of future partnership. Excellent references.—S. D., 8, Manor Place, Paddington Green, W.

ARCHITECT'S ASSISTANT desires RE-ENGAGEMENT. Ten years' experience. Passed R.L.B.A. qualifying exam.—Address, H. T. B. S., 3, Park Villas, Highgate, N.

ARCHITECT'S ASSISTANT (25) desires RE-ENGAGEMENT. Excellent provincial experience, good draughtsman, working drawings, details, specifications. First-class building construction testimonials. Salary, 35s. SIMMONS, Chesterfield Road, Belper.

ARCHITECT AND SURVEYOR'S JUNIOR ASSISTANT DISENGAGED. Over four years' varied experience, including designs, perspectives, details and specifications. Accurate, neat, and quick draughtsman. Salary moderate.—S. W. MEEK, Rosewyn, Truro.

BUILDER'S CLERK (42) desires RE-ENGAGEMENT. Thoroughly efficient in p. c. accounts, and all duties of office. Good shorthand writer. Accurate, energetic, and trustworthy. Used to large West-end jobbing business. Moderate salary. Good references.—E., 13, Well Street, Gray's Inn Road, W.C.

CLERK.—SITUATION required in Builders' Office. Bookkeeping, tracing, and general office work. Aged 23. Wages, 28s. per week. Middlesex or Kent preferred.—V., 43, High Street, Eltham, Kent.

FURNISH BY GRADUAL PAYMENTS

ON

NORMAN & STACEY'S
LIFE ASSURANCE SYSTEM.

This System enables customers to obtain, by small Monthly Payments, the immediate enjoyment of a well-appointed and artistic home of their own at less cost than renting furnished houses or apartments. By special arrangement with one of the best Life Assurance Companies, the Furniture, in the event of the Customer's death, at once becomes the property of the surviving family without any further payment whatever.

Recognising the demand for a larger and more varied selection than can well be shown at one establishment, MESSRS. NORMAN & STACEY now **Supplement their own Stock** by giving their Customers the additional advantage of selecting their goods from some of the Best Wholesale Houses in each branch of the trade. Every Household Requisite supplied. Goods delivered free in private vans. Terms made to suit the convenience of the Customer.

NORMAN & STACEY, LD.,
 118, QUEEN VICTORIA STREET, E.C.

SELSFIELD QUARRY.

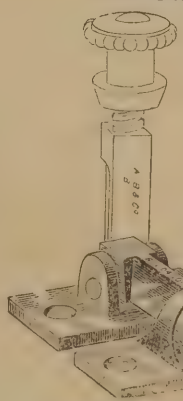
Blocks of this very durable **SANDSTONE** put on rail at 1s. per foot Cube. Architects should visit this quarry, only 35 miles from London.

ADDRESS:

R. GUNTER, Old House, near East Grinstead.
 Nearest Station, Kingscote, L.B. & S.C.R.

"Brighton" Sash Fastener

"WIND AND BURGLAR PROOF."
RATTLING SASHES "PREVENTED."
WINDOWS RELIABLY "SECURE."



Simple in Action, and secure when fastened, preventing the shaking of Sashes. By releasing the Lock Nut or Screw, the Arm springs back into an upright position, thus indicating at sight that the sash is unfastened.

Prices (per dozen):—
 Polished Brass, No. 1..... 12/-
 No. 2 (stronger) 17/6
 Gunmetal, No. 1..... 15/-
 No. 2 (stronger) ... 20/-

ALFRED BROWN

AND CO.,

City Lock and
 Brassfoundry
 Warehouse,
 81, SMALLBROOK
 STREET,
 Birmingham.

Telegraphic Address:—"LOCKS," BIRMINGHAM."

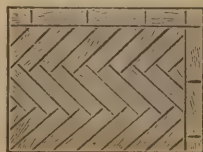
WOOD-BLOCK PAVING.

(MR. WHITE'S SYSTEM).

For Churches, Schools,
 Offices, &c.

Estimates and full particulars
 on application to
THOS. GREGORY & Co.

WOOD PAVING AND STEAM
 JOINERY WORKS,
 Clapham Junction, S.W.



G. BRADY,

MANUFACTURER OF
Revolving Shutters,

Sun Blinds, Window Guards, Hoists, Lifts, &c.

IMPROVED SWIVEL PARTITIONS

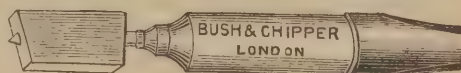
(Brady & Peace's Patent),

In Wood or Iron, for dividing Schools,
 Warehouses, &c.

WORKS—

BROWNSFIELD MILLS, Ancoats,
MANCHESTER.

GLAZIERS' DIAMONDS.



ILLUSTRATED PRICE LIST ON
 APPLICATION.

BUSH & CHIPPER,

11, President St., Goswell Rd., E.C.

ESTABLISHED 18 YEARS.

PILKINGTON'S

WORKS:

CLIFTON JUNCTION,
 NEAR MANCHESTER.

TILES.

MANUFACTURERS OF HIGH CLASS TILES
 For Floors, Walls, Hearths, Grates and Furniture.
 EVERY VARIETY OF TILE WORK FOR
 CHURCHES, PUBLIC BUILDINGS AND
 PRIVATE RESIDENCES.

London Show Rooms:

LYRIC CHAMBERS, 45, WHITCOMB STREET, W.C.

Manchester Show Rooms:

29, PRINCESS STREET, ALBERT SQUARE.



MODERN FIRE PLACES AT MODERN PRICES.
 LOCKS AND FASTENINGS UP TO DATE.
 SANITATION AS IT SHOULD BE.

B. WINSTONE, CATALOGUE FREE.
 Cross St., Finsbury, LONDON

BRAMLEY FALL AND ROBIN HOOD STONE

In large quantities and any sizes supplied immediately, either dressed ready for fixing or in the rough.

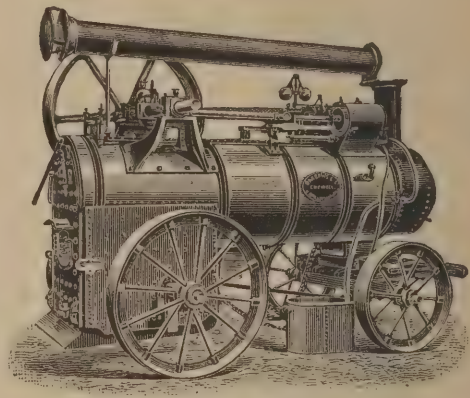
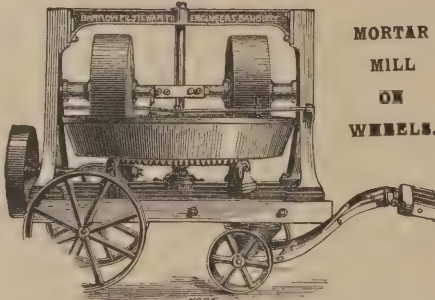
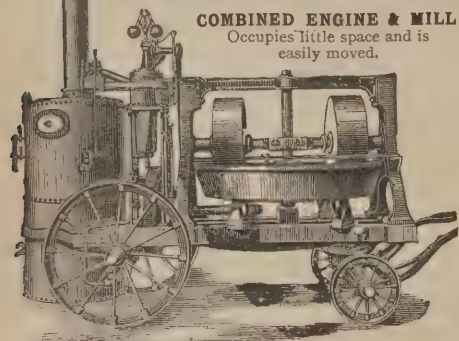
APPLY

B. WHITAKER & SONS, Ltd.,
HORSFORTH, LEEDS.

Telegraphic Address: "QUARRIES," LEEDS.

Telephone 2321.

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

"MARPEDO,"

The New Sanitary Washable Water Paint.

VARNISHABLE WITHOUT SIZE. SUBSTITUTE FOR OIL PAINT AND DISTEMPER.

IMPERISHABLE, DAMP-PROOF, and ODOURLESS. WILL NOT CRACK OR BLISTER.

More Durable, and 60 per cent. Cheaper than Oil Paint.

MAY BE APPLIED (Inside and Outside) TO BUILDING, WOOD, IRON AND PAPER.

MARPEDO PETRIFYING LIQUIDS FOR DAMP WALLS. MARPEDO COMBINATION VARNISH STAINS.

THE "MARPEDO" COMPOUND COMPANY, READING ENGLAND.

TO BUILDERS and CONTRACTORS.

The London County Council is prepared to receive TENDERS for the ENLARGEMENT and ALTERATION of the FIRE ENGINE STATION in Farringdon Road, Clerkenwell.

Persons wishing to tender may, on applying to the Architect's Department, Fire Brigade Branch, 21, Whitehall Place, S.W., and on depositing the sum of £10 in cash, obtain forms of tender and contract with the bills of quantities, and may also inspect the drawings of the proposed work.

The amount deposited will, after the Council has come to a decision upon the tenders received, but not before, be returned to the tenderer, provided he shall have sent in a bona-fide tender, and not have withdrawn the same.

Tenders must be delivered at the County Hall in Spring Gardens not later than TEN a.m. on MARCH 19, 1895, and no tender will be received after that time.

Any tender not made on the provided form, or which has been altered, or is not filled up and complete in every particular, will be rejected.

The Council does not bind itself to accept the lowest or any tender.

The contractor will be bound by the contract to pay to all workmen employed by him the London Trades' Union rates of wages, and to observe the hours of labour and conditions recognised as fair by the London Trade Unions at the date of the delivery of the tender, and such rates of wages and hours of labour will be inserted in and form part of the contract by way of schedule.

H. DE LA HOOKE, Clerk of the Council.
 Spring Gardens, S.W., February 20, 1895.

BOROUGH of SOUTHEND-ON-SEA. SANATORIUM BUILDINGS.

Builders desirous of Tendering for the ERECTION of one PAVILION, ADMINISTRATIVE BLOCK and OUT-BUILDINGS, are requested to send their names to

the Architect, Mr W. Y. HOBBISS, Clarence-road, Southend, not later than MONDAY, the 4th MARCH.

Plans and specifications may be seen, and bills of quantities obtained (on payment of £1 is, which will be returned on receipt of a bona-fide Tender) on application to Mr. W. Y. HOBBISS, on and after MONDAY, the 11th MARCH.

The Corporation invite TENDERS for the above WORKS, and the same sealed and marked "Tender, Sanatorium Buildings," may be delivered at my Office not later than FRIDAY, the 22nd MARCH at FIVE o'clock p.m.

The Corporation do not bind themselves to accept the lowest or any Tender. By Order,
 Southend-on-Sea, WILLIAM GREGSON,
 February, 29th, 1895. Town Clerk.

COMPETITIONS. TO ARCHITECTS.

DESIGNS and ESTIMATES are invited by Mr. N. MILLER, of 95, Fishergate, Preston, Lancashire, for a proposed fireproof block of Shops, Offices, two fully-licensed Houses, &c., cost not to exceed £50,000, on an area of about 2,500 square yards.

Premiums of £150, £100 and £50 are offered (in the adjudged order of merit) for the three designs which are selected as the most suitable, and which three designs will become the absolute property of Mr. MILLER.

The assessor to be an architect of eminence, and familiar with commercial property.

A plan of the site, with instructions to Architects, can be obtained from Mr. MILLER, on payment of £1 is., which will be returned to those sending in bona-fide designs.

All drawings, plans, sections, &c., must be sent to the Borough Engineer's Office, Town Hall, Preston, the name and address of the designer to be in a sealed envelope, enclosed with plans, &c., which will be respectively numbered, but no name, device or motto must be visible on wrapper. The plans must be sent in not later than May 27, 1895.

CHORLTON UNION.

TO ARCHITECTS.

The GUARDIANS of the Poor of the CHORLTON UNION invite COMPETITIVE PLANS for the Cottage Homes and Schools about to be erected by them at Styal, Cheshire. The Guardians offer a premium of £75 for the plan adjudged first in order of merit, £50 for the second, and £25 for the third. Sealed plans, with estimates, must be sent to me not later than Saturday, April 20, 1895.

Full particulars of the requirements of the Guardians and conditions of the competition will be supplied by the undersigned upon a deposit of a fee of £1 is., which will be returned on the receipt of a bona-fide design.

DAVID S. BLOOMFIELD,
 Clerk to the Guardians.

Union Offices, All Saints, Manchester.
 February 22, 1895.

BOROUGH OF PENZANCE. TO ARCHITECTS.

The Town Council is prepared to receive COMPETITIVE DRAWINGS for the erection of an INFECTIOUS DISEASES HOSPITAL at a cost of about £3,000.

Premiums of 30 Guineas, 20 Guineas, and 15 Guineas are offered in the order of merit for the three plans which are adjudged by the assessor to be the most suitable.

A tracing of the site, with levels marked thereon, also "Instructions to Architects," will be supplied by the Borough Surveyor, on payment of One Guinea, which will be returned on receipt of Competitive Drawings.

The Drawings, marked with a motto or device, and accompanied by a sealed envelope containing the name and address of the designer, are to be delivered at the Borough Surveyor's Office, Public Buildings, on or before TUESDAY, the 19th MARCH.

January 16th, 1895.

T. H. CORNISH,
 Town Clerk.

The Builders' Journal.

Vol. I., No. 6.

Tues., March 19, 1895.

ILLUSTRATIONS.

Clerestory, Waltham Abbey	81	New Conservative Club, Glasgow, Mr. R. W. Edis, Architect	89
Portrait of Mr. J. C. Rogers	83	A Fleet Street Front, by Mr. R. W. Edis	90
Oriel Window, Haddon Hall	84	An Autumn Sketch, 1863, by Mr. R. W. Edis	90
Crestings from Roof, Swainsthorpe Church, Norfolk ..	85	Entrance Gates, Eaton Hall, Mr. R. W. Edis, Architect ..	94
Portrait of Mr. R. W. Edis, F.S.A.	88		

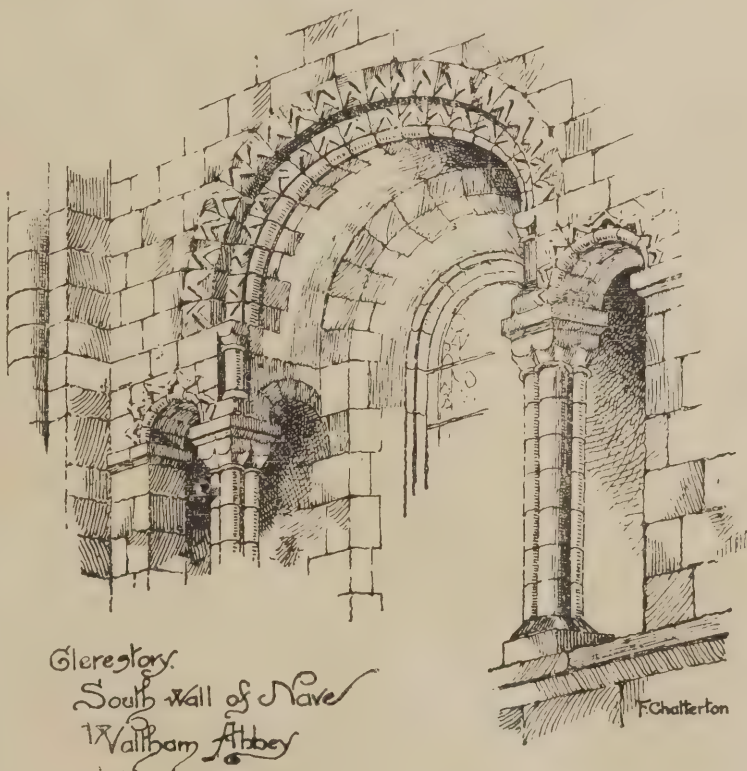
CONTENTS.

Imprudent Millions	81	Bricks and Mortar	84	Architectural Ironwork	93
Where the Mother of Parliament fails	82	The Proposed National Industrial Union ..	88	A Case under the New Building Act	93
Cast Iron "Art"	82	Men who Build, No. 6—		The Projected Alterations of Manchester Cathedral	94
The Builders' Journal Competitions	82	Mr. Robert W. Edis, F.S.A. ..	88	The R.I.B.A.	94
Italian Gothic	82	Architectural Association	90	Trade and Commerce	95
The Work of the Surveyors' Institution ..	83	An Art of which Englishmen should be proud ..	92	Society Meetings	95
		Professional Rules	92		

The Builders' Journal.

Imprudent Millions. THE Prudential Assurance Company, Limited, has held another yearly meeting, and the figures disclosed are assuming such gigantic proportions that a little light thrown upon the dark waters of this amazing Industrial affair will do no harm to the British worker. As an illustration of the magnitude of our operations, said the chairman, and the care exercised in the selection of our business, I may mention that we paid last year no less a sum than £52,000 for medical examinations and reports. Our chief office staff consists of upwards of 1,100 clerks, of whom 290 are ladies. The latter assist in writing out the policies, and are clever correspondents, as many as 2,300 letters per day being often written by them. We have 670 copying books in use, and over 18,000 letters, notices, and parcels are sent daily through the General Post Office, who send six sorters daily to sort the letters and obliterate the stamps attached to the correspondence. Our postage at the chief office alone costs us £18,000 a year, and our stationery £27,000; and if I chose to go into minor details I could tell you the weight of brown paper, string, and sealing-wax we consume annually. We have also 60 calculating machines in use—not the old-fashioned ones invented by Babbage 60 years ago, but beautiful instruments, capable of solving long sums in multiplication and division. These figures, however, are lilliputian compared to the more financial details, for the "report" presented, showed that in the ordinary branch the number of policies issued during the year was 61,744, assuring £6,282,120, and producing a new annual premium income of £339,957. The premiums received were £2,077,956, an increase of £223,586, and the claims were £518,131. In the industrial branch the premiums were £4,244,224, an increase of £272,360, the claims being £1,548,377. The number of free policies in existence granted to those who have discontinued their payments is 398,078. The average duration of the

policies in this branch is nearly seven and a half years. The valuation shows a surplus in both branches of £1,326,047 (including £460,000 brought forward), of which it is proposed to distribute £576,047 and carry forward £750,000. The assets amount to £21,213,805, and include £5,000,000 advanced upon rates, £1,800,000 upon Indian and Colonial securities, and upwards of £2,000,000 each in Consols, railway debenture stocks, freehold ground-rents, and mortgages. If the income which is derived from the Industrial branch be added, the total in-



Clerestory.
South Wall of Nave
Waltham Abbey

come is brought up to about £6,300,000. Now £6,300,000 means a weekly premium income of £120,000 or say £20,000 a day. These figures and sums are the more astounding when one discovers that the whole gigantic fabric is built up of pennies. The penny is the item of the Prudential Assurance Company. It insures one out of every four persons in the United Kingdom, and an enormous majority of its policies are of the penny a week premium. We have taken the trouble to collect these figures first hand, and also this astonishing—and what

we shall call an iniquitous—fact, that although 60,000 policies are issued every week, 35,000 policies lapse during the same period. Hence, the millions. The way the business of this company is worked is extremely simple, or it would never have entered into the brains of Messrs. Lancaster, Dewey, and the other gentleman, who laid its foundation stone in a room near Ludgate Hill some forty years ago. The Prudential Assurance has thousands of agents dotted over the country, and these agents devote nearly the whole of their time to the business of the Company. In hun-

dreds of villages the brass plate on the door of the Prudential agent is the only brass plate to be seen, and these men think nothing of sending up hundreds of application forms a month for policies on the lives of children upon which the premium is one penny per week. At a glance the whole system can be grasped, and how easy it is for a man gifted with "the gab" to induce hundreds of persons to insure their infants when it only costs a penny a week. That the insurance itself is beyond the merest suspicion goes without saying, the Prudential has been known to do many kind and just deeds in its career, but the fact that 35,000 policies a week are lapsed is the reason, and the only reason, for the accumulated millions of the Prudential Assurance Company, and in our opinion it is time that some of those millions were distributed among the policy holders, or some other system introduced whereby 1,820,000 persons no longer pay one penny a week into the coffers of an insurance company, and eventually, by their own inability to continue the payment, lose the benefit of what they have

paid. The mere fact that there are 398,078 free policies in existence, "granted to those who have discontinued their payments" weighs with us as a feather. Every single policy among those tens of millions that are lapsed should have had some surrender value, or some value as a permanent free policy. If not, then the whole thing becomes a game of "spoof;" and the humble—the world inspiring—penny is building up millions which would be better administered by the State. We shall return to the subject in more detail.

Where the Mother of Parliaments fails.

THE Report of the Select Committee on the Unemployed is dull, formal reading. We do not believe in Select Committees upon anything. They "report," and they have done. In fact, they are more select—using that word in another sense—than serviceable. There are so many classes of "Unemployed." The builder has been unemployed this winter; so, too, has the architect, for the season has been dead against building and more than a few men of acknowledged eminence have had reluctantly to reduce their staffs. The hod-carrier and the mason's labourer have not had the complaining all their own way. But Select Committees only interest themselves in the daily bread and manual worker side of such questions, and we are not aware that the "professions" are even "called." Yet, as a matter of fact, quite a number of the "professions" could give some startling evidence, but we will divulge no secrets, contenting ourselves by the jejune remark that everything seems overcrowded. More forcibly, we might say that the unemployed problem can be put into plainer phrase: there are too many people. We do not doubt but that the Select Committee aforesaid, went diligently to work, carefully digging up and arranging in rows no small display of facts, and carefully shutting its eyes to the vital truths which stand revealed, once the mere scaffolding is pulled down. Unfortunately, on these Committees, we rarely, if ever, get beyond facts and figures. Mr. Keir Hardie, M.P., whose methods we do not admire, but whose facts sometimes live and breathe, gave the gist of the situation in one of his speeches last week. He had verified the one "million unemployed" theory that so startled Lord Rosebery and politicians generally, and ended by startling them. In Bradford, said Mr. Hardie, on the authority of a committee of trade unionists and others, 55,000 men, women and children are bordering on starvation. Reports from Leeds, Liverpool, Manchester and Glasgow, paraphrase the same tragedy. Mr. Hardie makes bold to double his former estimate and defies contradiction. We think it more than likely that his original hypothesis, at least, is true. Two millions would be too terrible. If there be two millions, the problem is all the harder to face. Yet, in full consideration of the evidence, the Select Committee cannot bring itself to recommend or endorse any of the schemes suggested for the alleviation of the distress. We will not enter upon the larger and more controversial issues locked in the pet schemes of this or that theorist. The schemes may be bad, improvident, impracticable. They may be day-dreams or nightmares; the wishy-washy philanthropy, on the one hand, or the ensanguined outcome of Socialism, on the other. But, after all the barren business of committees and commissions, this seems to us clear and worthy the resolute attention of those with any power of sympathy left in their hearts—two millions of people, or one million, or half a million, cannot be allowed to die by gasps, starving in their sheer inability to earn the pittance that spells food. We are aware, we do not need to be told, of the loafers who contaminate the rest. It is the business of those who would re-adjust present day conditions, to sort the sheep from the goats, to recognise the people who will work from the people who will not. Even the wives and children of those who *will not* cannot be permitted to perish. But the people who *will*, and claim immediate thought and immediate help. In the great industrial hives of the North, in this dense-packed, wonderful city, so cruel to its poor, in beleaguered agricultural districts, where the labourer is turned away by the impoverished farmer, the cry goes forth that people are suffering; that even, in a matter-of-fact and

somewhat murderous end of a century, there are those too proud to speak aloud of their misery, too high-souled to scramble openly in the market-place for bread. No Select Committee will ever reach these; their evidence will never be "called." It has struck us that their voices are as the voices of the dumb—inarticulate, confined, at best a moan. No Select Committee need have been called to result in so negative an answer. The time for "regret," however sympathetically expressed, has gone by, yet there is the danger, too, of impulse, of excitement—neither desirable, if this question is to be broadly, calmly fronted. Not by the clashing of arms and the confusion of issues will the remedy be found, but rather, to our thinking, in those brighter, younger countries, which are still Britain in allegiance if not in name. There is the opportunity of all opportunities, the chance for the statesman who is not content to remain the politician; the germ of that Imperial idea which would lessen our own kingdom's necessities and responsibilities, and restore some measure of prosperity to the thronging, hustling masses who overcrowd the labour market. A happier ray of hope than any in the Select Committee's report, is the coming spring and summer. Nature gives temporary relief at least, succeeding where the Mother of Parliaments fails.

Cast Iron "Art."

A LITTLE straight talking on art school matters is sorely needed, and, once uttered, should do good. We are very much in agreement, on many points, with Mr. E. R. Taylor, head master of the Birmingham Municipal School of Art, who spoke some weighty words to the students of the Burslem School of Art, last week. Art school teaching has indeed suffered, as Mr. Taylor says, in common with general education from the mistaken notion that it is only a process of cramming. "Payment by results" has indeed been the result; a system "testing educational work by the pound and yard, which had so marred, degraded, and crippled the teaching power of the country, that it would be several generations in recovering from its ill effects." This utterance is deliberate and grave, and it should make certain dogmatists pause. Mr. Taylor's sympathies and our own are all against that "cast iron system" of which he complains. The teacher's love of his pupil has been the salvation of many an art student, for individualism is a truth in art as well as a trade secret, and military-like uniformity is the Juggernaut that crushes the weaker beneath its wheels. Mr. Taylor's address was so forceful and pregnant of import, we must quote a few of his concluding sentences. Having spoken in favour of the teaching of design in conjunction with the earlier studies of pupils, remarking that to defer exercises in invention and design was like forbidding a man to enter the water until he could swim, he observed "that there had been a great movement in the direction of dual teaching recently, and he wished it were possible to compare the exhibitions of the national competition of the last few years with those of twenty years ago. He attributed the hindrances to work in the past, and to the further development rendered necessary, to parasites which clung to the living organism. It was not known who they were, but the ill effect of their work was felt; they knew nothing about education, and as much about art." We should all like to hear of the extermination of these "unknown" parasites.

New day and Sunday schools are about to be erected in the Christ Church parish of Colne, at an estimated cost of £2,000.

The Builders' Journal COMPETITIONS.

TO COMPETITORS.

THE drawings for the first of this series of Competitions must be delivered to our offices not later than Monday, the 25th inst. The drawings must be submitted under mottoes, and sealed envelopes containing the motto used by any competitor, and his full name and address, must accompany them. In the issue for the following day, Tuesday, March 26th, the name of the Professional Assessor will be announced and also the full details of the Second Competition.

ITALIAN GOTHIC.

A PERSON accustomed only to that special and beautiful Gothic of which this country possesses so many noble examples, would at first feel disappointment on beholding St. Petronio, Bologna, St. Antonio, Padua, or any other Italian church. In them he would in vain look for that picturesque multiplicity of parts and strong contrasts of light and shade produced by the congeries of moulding and profusion of tracery with which the modern Gothic abounds. He would, perhaps, consider as bald the large uncut planes, ornamented by surface decoration only—such as mosaics or frescoes. Then, again, the immense span of the pier-arches, and also their height relatively to that of the partition walls, leaving no room for a triforium, or even a proper clerestory; the great breadth of the aisles themselves compared with their length, the absence of large windows for the display of tracery; and the stiff foliage of the capitals, too vividly calling to remembrance the Classical types—all these features which are characteristic of Italian architecture can hardly fail to create disappointment at first. But what seems most extraordinary is, that English architects should so hastily criticise these buildings, forgetful that their own conceptions of the beautiful are thereby exposed to the danger of censure; and it is still more strange that some should even assert of Italian Gothic that it is an imitation, but a most contemptible one, of the Northern Gothic. Surely we cannot suppose that men of undoubtedly great minds, many of them universally acknowledged as having excelled in painting and sculpture, could have produced buildings—and these, too, almost unmatched in size—differing so entirely and so systematically in many respects from those of the Northern Gothic, if they were all the while attempting to imitate them. Is it not more reasonable to conclude that those peculiarities which have been by some so readily styled faults, were, in fact, the results of a perception of beauty in the architects different from ours, but not the less true? Can we not conceive that architectural excellence may lie equally in the boldness produced by simplicity of ornament as in the variedness consequent upon the multiplicity of parts? Is the mystery of the Northern Gothic, by which the mind is kept in a state of unsatisfied curiosity, alone to be sought after, while the repose resulting from a complete comprehension of the design is to have no claim upon our regard? In fine, must we not admit that, as in individuals, excellence may exist as well in one combination of mental qualities as in another, so also it may be found in different architectural productions, which are the lasting impressions of the collective minds of the age and country to which they belong?

THE WORK OF THE SURVEYORS' INSTITUTION.

A CHAT WITH MR. JULIAN C. ROGERS.

A VERY remarkable Institution, winning its success in a quiet way, is the Surveyors' Institution. For more than a quarter of a century it has been steadily progressing, until to-day, it can be described—and this in no fulsome phrase—as one of the most solid and satisfactory organisations in London; one with its ramifications through the length and breadth of the land, keeping in touch with its members by a clever system of intercommunication, answering queries, obtaining information, and generally acting the part of Alma Mater to surveyors, land agents, and land valuers, many of whom are also engineers and architects.

One day last week, I mounted the stairs of the Medical Examination Hall, in Savoy Street, to find Mr. J. C. Rogers, and to have a look at the 200 busy candidates who were tackling their five days' examination to win associateship or fellowship, as the case might be. Performing a minuet over drawings, compasses and "T" squares, and being as oblivious to the work in hand upon the innumerable little desks, as friendly interest would permit, I gained the desk where the secretary sits with his assistants, superintending the conduct of the examination.

Mr. Rogers is a busy man, for he is editor of the "Transactions" and manifold publications, as well as secretary to an institution now numbering 2,500 members. He is so full of the affairs of the day, that he looks a little astonished when I enquire his birthplace. Presently, I hear of Farnham, Surrey, and that he is the nephew of Professor Thorold Rogers.

"Tell me, Mr. Rogers, what it is at which your institution aims? What is your guiding principle?"

"Our principle is to be practical as well as theoretical, intensely practical, I might say, and our examination system is addressed to the purely practical aspects of the three classes of land agents, valuers and building surveyors, into which, speaking roughly, the membership is divided. We place great reliance upon 'scale' work. The good results, not alone to surveyors, but also to architects, are inestimable. You see, on this sectional plan, a number of the little square desks are coloured red. All the occupants of these are men studying to be land agents. I find that the men who come up from the country, in the majority of cases, intend to become land agents, but you must not describe this as a hard-and-fast rule. Some candidates have a bent for the architectural side, and others for the financial side—valuing. I generally find that what you would describe as the 'cute fellow,' more particularly if he be a London man, goes in for valuing. You see there is so much scope in London; the area is so wide. The little "blue" squares on my plan are taken up by men who are going in for valuing, while the "yellows" take building, surveying, and quantities."

"Have you a preliminary?"

"We have, which students may enter when they are eighteen. When the time arrives for them to try for their Associateship, a studentship is of use in this way: those who have been students pass with 500 out of 1,000 marks; non-students 700 out of 1,200."

"Then you set non-students the stiffer papers?"

"We do; we desire all candidates to become students. An associate over twenty-two years of age may go in for his Fellowship, but we do not debar non-associates, only the

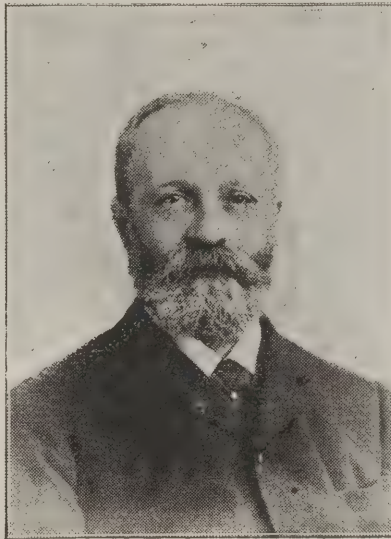
examination they have to pass is of a very high standard indeed, the percentage of marks being 1,200 out of 1,500."

"Your percentage of passes?"

"About 70 per cent."

"That is very good. Now, tell me, Mr. Rogers, whether your institution undertakes the preparation of students, 'coaching' them, so to speak, in any way?"

"Not in the least; they make their own arrangements. Much of the work is done by correspondence. Now, I believe there is a lot of cant talked against this so-called "cramming" system. A student is bound to have help; look, otherwise, at the diffused, mis-spent energy! The subjects are so wide and comprehensive, sound guidance is absolutely necessary. Many a student is unable to obtain this near to hand; he has to go afield. Of course, we supply candidates with a syllabus so that they may have a good knowledge of the range of subject to be attempted; we suggest text books also. I should like to make it clear that all our candidates are examined in practical land surveying. We open our examination by test work in Lord Jersey's park. You would like to have a list of our subjects? Well, it is a long list. There are nearly forty subjects for the various branches but I might briefly



MR. JULIAN C. ROGERS.

indicate to you a few. For instance, a paper on agricultural chemistry is submitted to the more advanced; construction and arrangement of farm home-steads is a subject upon which we lay stress; we have a very strong paper on quantities; the law on land and arbitration matters; levelling; field work, so on—you might fill a considerable space with a list of subjects. Of course the subjects are assorted according to the aims of the three classes into which we break up candidates."

All this was highly interesting. *Apropos* of nearly 2,500 present day members, Mr. Rogers told me he could remember the time—14 years ago—when two candidates only sat down to attempt the papers. The Institution, like the oak, has from the acorn grown.

Now the Institution is wealthy and opulent with a fine reserve fund and the intention shortly, to erect a commodious building of its own. The valuable transactions the Institution publishes from time to time, and the whole library of attendant literature that it issues to its members is the highest testimony to the usefulness and universality of the scheme. I asked Mr. Rogers to give me a hint of the way in which the Institution keeps in touch with its members.

"For instance, we get a query," said he,

"that query is at once set up into type and proved. We send proofs to some half dozen members who we know are authorities on that particular question. We have a list of men and subjects. We ask them to do their best to answer the question, or to name to us some likely authority or source wherein it may be found. Within twenty-four hours we get answers from say three out of the six. These, too, are set into type, and the answer or series of answers is sent to the enquirer within forty-eight hours of the receipt of his letter. More than this, query and answer are printed in the Issues of the Institution, and in this way we obtain a valuable and interesting record of points that have cropped up in the course of practical work. Then we promote our members to positions of responsibility on the Council, election being a matter of ballot, so that we are kept entirely in touch with all who have ever passed the examinations and become associated with our organisation."

"And your Council works well?"

"It works admirably, and to its efforts may be attributed the marvellous success we have had."

"Has not the Institution been of great service in shaping the new Building Act?"

"Yes. The opposition to the Bill cost us about £900, but the result has more than justified the expenditure. The Act may be regarded as a good working measure, though serious defects will no doubt reveal themselves as time goes on."

On the whole, the impression left upon my mind by my hurried interview with the busy Secretary was, that here, at any rate, is a professional Institution, alive at every point, and managed by a governing body possessed of rare sagacity and practical good sense.

PROBATE was granted on March 11, of the will of the late Edward Graham Paley, F.R.I.B.A., architect, Lancaster, of the firm of Paley, Austin, and Paley, the eminent ecclesiastical architects, who died January 23, 1895. The net value of the estate is set down at £71,939 1s. 4d. The testator bequeaths the whole of his household effects, plate and other articles of value, horses, carriages, stables, &c., for the use of his wife, together with the house at The Greaves, Lancaster, and after her decease for the use of his two unmarried daughters (Frances Emily and Mary Elizabeth). To his only son, H. A. Paley, a partner in the firm, he bequeaths the whole of his office property and effects, books, and instruments. The residue of the estate is placed in trust, from which the widow of the deceased is to derive £800 per annum, his four children deriving equal benefit from the remainder. He bequeaths £100 each to his grandchildren, and £100 to a god-daughter. £100 is also left at the discretionary disposal of the Lancaster Charity Trustees, except for which the whole of the bequests are of a private nature.

We understand that the Right Hon. Lord Cross has consented to lay the foundation stone of the new church of St. Lawrence, on the afternoon of Monday, April 22. Lord Cross, who was a very old friend of the late Mr. C. R. Jacson, is now connected with the district through his inheriting the estates formerly in the hands of the Misses Cross. Lord Cross will be the guest of the Ven. Archdeacon Hornby.

An enormous gas engine has just been fixed at the works of the Swan Field Shed Company, Limited, Colne. The engine has a maximum of 280 horse-power, and is the largest single cylinder gas engine in this country. Until within the last few months it might be said to be the largest in the world, but recently, in France, one of somewhat larger dimensions has been built. The engine is to work 720 looms.

THE estate of Toddington, in Gloucestershire, now in the market, presents a combination of the mystic number seven. It has been 700 years in the same family, consists of 7,000 acres, and includes 700 acres of fruit farms.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
19th March, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE quaintness of our big towns is disappearing, and each building season witnesses the demolition of that picturesqueness—old style—for which we confess to a sneaking fondness while we admire the architecturally spick and span structure upon which some art and much labour have been spent. Old Liverpool would seem to be going the way of Old London, and in a little while nothing will be left, save evil-smelling uninteresting slums. We hear that the block of warehouse property at the corner of James Street and Back Goree, one of the most ancient corners in Liverpool, and now owned by Mr. T. H. Ismay, is to be pulled down and replaced by a handsome suite of offices, for which designs have been prepared by Mr. Francis Doyle, architect. Beneath these buildings it is said is a subterranean passage some fifteen feet wide and eight feet high, extending to the site of the old Tower of Liverpool at the foot of Water Street, and in the middle ages connecting that stronghold with the Royal Castle at the top of James Street. On these grounds, when the site for the new block of offices comes to be excavated, some interesting discoveries relating to the town in the middle ages are anticipated. Here is the *scenario* for a breezy romance.

At the ninth sessional meeting of the Historic Society of Lancashire and Cheshire Mr. Gregson read a paper, prepared by the Rev. A. W. Wall, on "Sefton Church," near Liverpool, the church dedicated to St. Helen, which is a very ancient one. When the first church was built is not known, but it is supposed to have been built early in the twelfth century, for in 1204 the vicar had a dispute with the monks at Lancaster. The early church was supposed to have been supplanted by a Norman perpendicular church in the thirteenth century, since which time it had received such considerable alterations and additions, principally in the fifteenth century, that only small portions of the ancient church could be traced by the Norman workmanship and masons' marks.

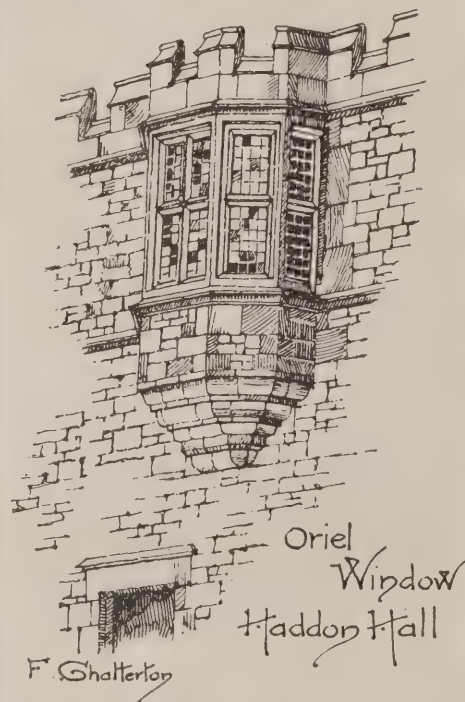
THE forthcoming Art Loan Exhibition at the Guildhall will be strictly confined to about eighty works of the British school, a few fine examples of J. L. Gerome, and about forty celebrated works of the Dutch school. Fully twenty of the latter have never before been exhibited in a public gallery. The present permanent collection was closed yesterday, to allow for the reception and hanging of the new pictures. On Saturday, the 20th prox., the Lord Mayor will open the forthcoming exhibition.

ONE of the objects of the scheme propounded by the London Polytechnic Council

is the creation of branch technical institutes affiliated to the larger polytechnics. At these establishments special attention will be devoted to local industries, and their management will be conducted on lines similar to those adopted at the Herod's Institute, Bermondsey.

FREE lectures are not always the better attended because they are free, but the course instituted by the Carpenters' Company should commend itself to all industrial workers. The annual series is now being held on Wednesday evenings, at the Company's Hall, London Wall. These lectures, as in past years, appeal particularly to those connected with the building trade, but such names as Sir E. Leader Williams, Professor Banister Fletcher, and such subjects as "The Works of the Manchester Ship Canal," and "Coloured Decoration in Architecture," &c., make this year's course highly interesting to a much larger public. Architectural students, generally, would do well to attend these lectures.

THE volatile, voluble Frenchman, M. Lacroix, of Hastings, the case against whom was pending when we went to press last



week, continued his unconscious humour in the Queen's Bench Division on Monday. The defendant spoke in broken English which neither the jury nor anyone else understood. At the conclusion of his remarks his lordship humorously remarked, "Have you anything more you wish to say or swear to?" "Ah, yes," said the defendant, after a pause, and proceeded to enter into details that were not stated on the pleadings, whereupon he was stopped by the judge with the remark, "Oh, that is all nonsense." His lordship also told the defendant that he had done wrong in sending him (the judge) a telegram on Saturday, and that if he (defendant) were not a foreigner and absolutely ignorant of the procedure in English courts, he (the judge) should not have condescended to reply to the telegram, although it was prepaid. Charles Jones, a solicitor, was called by the defendant, whose first question was: "Why did you refuse to act for me?" "Because I thought you had no case," was the immediate answer, amidst laughter. Later on the defendant charged the witness with not answering the questions, whereupon the judge said, "I don't wonder the witness does not answer your questions. You don't put a question which he can answer. You must

not chatter so much." But M. Lacroix continued to chatter, though this did not prevent him losing his case. His lordship, in giving judgment for Messrs. Gant & Slater, architects, of Hastings, who were awarded £250 damages, granted an injunction restraining the defendant from republishing the libellous letter complained of. As the defendant left the court he said he intended to publish the letter.

THE Metropolitan Gardens Association has offered to arrange the churchyard of St. James's, in Pentonville Road, as a public garden, at a cost of £500, and the Clerkenwell Vestry has agreed to maintain it. The Vestry has instructed its legal agents to apply to the Consistory Court for the requisite faculty. The churchyard, which is remarkable for being the most dismal open space in London, contains the grave of Joe Grimaldi—a strange resting place for a strange fellow.

THE show brought together by the members of the International Society of Wood Engravers, of which Mr. W. L. Thomas, R.I., is the president for the current year, has excited genuine interest and some controversy on the much vexed question of process work *v.* wood engraving. Wood-engravers feel great interest in a question affecting their status, and by this Exhibition they not only demonstrated their own individual capabilities, but challenged those who prefer process work to show anything like such artistic results. Nearly 300 "pulls" on India proof filled the cases in Stationers' Hall; extremely beautiful illustrations of the finest possible productions of the art of the wood engraver, and amongst other examples was the famous picture of London in 1851, drawn by Thomas Sulmon, and engraved in the studio of R. London, which cost £500. Mr. E. F. Donner sent many splendid specimens, including his Madonna and Child, with Saints after Andrea del Sarto; and his Bacchus and Ariadne, after Titian. Mr. F. Babbage contributed a good collection, notably "The Poppy," after H. Holliday, which illustrated the effect of a white line on a black ground as distinct from the copper method of a black line on a white ground. Mr. E. Nicholas sent reproductions of pictures by Wal Paget. Mr. A. Woof had an excellent example of work in "Tunnel Boring" (No. 148), after Mr. W. Hatherell, R.I.; and Mr. W. T. Smith, a masterly bit of work in No. 185, "Grandmother," after the picture by Lochart Bogle. Mr. J. M. Johnstone exhibited a large number of specimens of his work, chiefly faces or figures, but there were also amongst them delicately-executed scenes, such as the farmyard, where he had used a marvellously fine line. Mr. W. B. Gardner lent a proof of his engraved portrait of George Meredith, by G. F. Watts; and Mr. A. Thompson a pretty work, representing two lovers on the bank of a river. We quote elsewhere from the vigorous and well-timed letter of Mr. Joseph Pennell, on wood-engraving. No one regrets more than ourselves the gradual usurpation of wood-engraving by other and cheaper methods. But the utility of process and mechanico-reproductive work cannot be denied.

THAT biggest of big embankment hotels, with its portly face to the river and its unpleasant reminder of Jabez, still cries out for "more room." A special general meeting of the members of the Liberator Building Society was convened by Mr. Wheeler, the Official Receiver and Liquidator, and held at the Holborn Restaurant at noon yesterday. The object of the meeting was to consider and approve the Bill in Parliament designed to improve the property of the Society known as the Salisbury Estate, situate between the Strand and the Embank-

ment. Upon this estate have been erected large blocks of buildings which are specially adapted for utilization as a hotel, and which it is hoped will be opened for that purpose early next year. When this occurs the amount of traffic passing to and from the property will be very large, and having regard to the already congested state of the Strand, it is considered of great importance that the roadway of the Strand should be widened at this point. The present Bill has therefore been promoted to acquire the houses fronting on the Strand for the purpose of carrying out necessary improvements. Although this will necessitate the expenditure of a considerable sum, the Official Receiver is advised, and believes, that a large portion will be recouped by re-sale of the property acquired, and that the difference should be covered by the improved value which will be given to the rest of the property. This seems to us a cart before the horse arrangement. You build your building and reform your site. We presume the new hotel hunters to look down on the Strand.

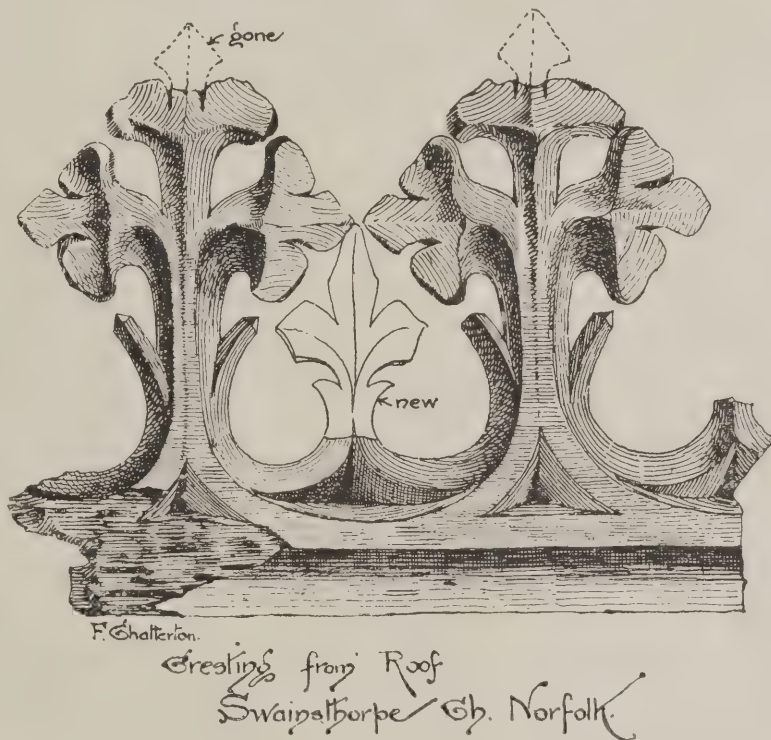
THINGS are moving a little, even in Bethnal Green, where a new infirmary is to be added to the workhouse, the site already having been purchased. By the way, the workhouse in Bethnal Green is said to be the most backward in London, and the overcrowding is something appalling, the wards, which are certified to accommodate a little over 1,200 inmates, at present containing over 1,880. The guardians, however, have made arrangements with the City of London Union to take a certain number of the old people off their hands with a view of relieving the congested state of the building. One of the chief defects of the building is that there is no separate infirmary, but only sick wards in the main building. The guardians expect that the new infirmary building will be finished in about two years.

THE old "Town Hall," Sheffield, is to be elevated (and altered) to the dignity of "Court House." We trust the traditions of the old place may remain undisturbed. The extension will be made by the erection of buildings on 670 yards of land in Waingate, which has been agreed to be leased by the Town Trustees to the Corporation, at an annual ground rent of £240, for a term of 470 years, which expires at the same time as the lease of the site of the existing buildings. The new building provides for an additional court 53ft. by 33ft., about the same size as the existing large court, and similarly arranged and furnished in oak, having a large corridor for waiting witnesses, a solicitors' room, and a room for consultation, all on the ground floor, entered from the far end of the existing ground floor hall. Additional offices are also provided for the Stipendiary Magistrate and the magistrate's clerk, and a large room, about the same size as the present grand jury room, is provided for the magistrates. The magistrates' entrance from Waingate is to be enlarged and made more important, and is to have an entrance hall and improved staircase. Under the court there will be cells.

THE ventilating arrangements for the new building provide for 3,000 cubic feet of fresh air for each person per hour, which is the recognised maximum quantity requisite to maintain the normal condition of purity. It

is to be heated when required by hot water pipes in the basement, mixed with cold air to the required temperature, and driven by a fan into the court and other rooms. The foul air is to be drawn out by another fan. The chief constable and the architects have visited the most recently erected courts and police cells in the kingdom, and have advised the repeating of the arrangements of the old Sheffield courts in the new one, especially as to the position of the prisoners' dock at the side; and, with respect to the cells, the only improvement on the old ones which they have seen is the substitution of glazed brick surfaces for white-washed walls. The architects, Messrs. Flockton & Gibbs, estimated the cost of the building to be £17,000. The Watch Committee recommend the acceptance of tenders amounting to £15,684, including buildings, heating and lighting, and all the permanent fittings. The design of the buildings is of the simplest character, both externally and internally, to harmonise with the existing building.

ARCHITECTURAL History is an absolutely vital subject, and yet one too much neglected by the young architectural student. Mr. B.



Priestly Shires, A.R.I.B.A., of Plymouth, is doing good service by his exhaustive and carefully expounded lectures, the sixteenth of which he recently gave at the School of Art in that town. Mr. Shires, in speaking of the Perpendicular period of English Gothic architecture, said that it was characterised by the exuberance and redundancy of its ornaments, and was wanting in that simplicity which was to be found in the decorated style. In the earlier examples this enrichment was not carried beyond bounds, but in later examples it became excessive, which proved injurious and at last fatal; and English Gothic began to decline from the commencement of the fifteenth century with the straining after perpendicular lines. Arch moulds were in many cases continued down the piers to the base-mould or plinth, or even to the pavement; consequently, neither capitals nor bases were much required, and this, Mr. Shires said, perhaps formed one of the many reasons of decay in the art. Where caps were introduced they generally took the same plan as the piers, and were so narrow from abacus to neck as to give to a casual observer the appearance of simply a

band or impost-mould. Foliage, like mouldings, &c., assumed angular shapes in outline, and also gave a conventional appearance.

THE perfection attained in the earlier styles, was not easily lost, and much of the ornamentation was well adapted and often very carefully executed. The wreath-like form of cap of the Decorated style was still adhered to, but the foliage was shallower and less true to nature, and throughout the whole period there was a squareness of outline observable. The mouldings differed much from those of preceding styles. They were in general more shallow, and it was a characteristic feature of this period to stop the mouldings on bases, or by the introduction of an ornamental stop. The hammer-beam roof was a feature of the style and fan tracery vaulting; some of the best examples of the style were the Choir of York, 1372—1403, Lavenham Church, Winchester Cathedral west front and nave, an illustration of which appeared in an earlier number of "THE BUILDERS' JOURNAL." There were also manhood examples as late as 1600.

OUR heart was wrung in a new way the other day, and we confess to the novel sensation. We had read the case of Fincher, who is a saddle-riveter, and cannot earn more than about £5 a week at this laborious occupation. The slave of toil agreed with an oppressor of the name of Betts to work for a fortnight, and got a sovereign in advance. After that he declined to fill his contract, and the employer had the heartlessness to summon him. The poor fellow had been out on strike (a man who cannot earn more than fifteen shillings a day must be expected to strike) and "wanted a sovereign," (a most natural and not uncommon want) and he got it on Saturday by promising to come to work on the following Monday; but with a fine spirit he admitted to the magistrate that he never intended to keep his promise. "But," said the magistrate, "if the money was a loan the lender could have sued you." Observe the simple manliness of this answer: "Defendant (laughing): I should have said I hadn't had it. He'd no witness, and I'd put my hand to nothing." Yet the

Bench ordered Mr. Fincher (though he has a wife and children to keep out of that miserable five pounds a week) to pay the sovereign with costs; and had the cruelty to hint that he would have to go to prison if the sovereign and costs were not forthcoming. Here is a new trade for other people's "boys." We commend it to general consideration, and we feel with Fincher, but the feeling is not of pity.

THE British Museum is suffering from the "universal depression," and so, we might add, are its "readers." The Trustees have laid a petition before the House of Commons through Sir John Lubbock. It recites that the only funds belonging to them "for the support of the British Museum" consist of £30,000 in Consols, returning £825 yearly, of a bequest from the late Earl of Bridgewater returning about £400, and another from the late Lord Farnborough returning about £80. "The establishment is necessarily attended with an expense far beyond the annual produce of the sums above-mentioned, and the trust cannot, with benefit to the public, be carried on without the aid of Parliament."

Accordingly, the House is begged to grant such further support as shall seem meet "for the general benefit of learning and useful knowledge." It is a request for a fixed annual charge upon the revenue, independent of special grants. We have been of the opinion for some time that Consols do not provide a visible means of subsistence. Surely the above proves it?

MR. SYDNEY BUXTON, M.P., in unfurling a new banner for the Western (London) District of the Amalgamated Society of Carpenters and Joiners, spoke of the strong interest with which he had viewed the development of trades' unions, and said that not only were the workers concerning themselves more and more in their own affairs, but the public generally was taking a deeper interest in labour questions. He did not believe that the country was in favour of the State arbitrarily intervening between capital and labour when industrial difficulties occurred, though much might be done towards conciliation in endeavouring to bring together the parties engaged in such disputes. He was of opinion that the extension of trades' unions was far more likely to make for industrial peace than for industrial war.

OF the £40,000 required for the rebuilding of the London Dental Hospital, about £11,000 has been already collected, but the greater portion of this, £6,000 at the lowest computation, has been subscribed by the dental profession. A considerable proportion has also been either subscribed by the students, or acquired through their exertions in organising entertainments. There is no prospect of the building itself being commenced until more funds are in hand. The site, which is purchased, proved more expensive than was at first anticipated, as it included a public-house. And though the estimated value of the present buildings for business purposes is estimated at something like £15,000, this sum, which would go so far towards making up the required £40,000, cannot be realised until possession is given, and this cannot, of course, be arranged until the institution has found another habitation.

THE new hospital for infectious diseases which has been in the course of construction at Flaybrick Hill, during the past twelve months, for the Corporation of Birkenhead, is spoken of as the completest building of its kind in the Kingdom. The building has been completed and furnished at a total cost of £17,400, and has accommodation for forty-four beds. In the entire work, Mr. Brownridge (borough surveyor and engineer) has been the superintending spirit. The site of the hospital has an area of about $5\frac{1}{2}$ acres, and varies from 83'0 feet at the entrance gates to 112'0 feet at the upper end above the level of the sea. The site is very open, and affords an extensive view over Bidston Moss and Wallasey. The buildings at present erected are the administrative block, isolation or private ward pavilion, three ward pavilions, laundry and disinfectant block, mortuary, and van house, giving accommodation for 44 beds; but there is room on the site to erect five additional ward pavilions, giving a total of 104 beds. Each of the pavilions and the administrative block front to the south. All the buildings (which have been put up by Messrs. Kelly Brothers, Walton) are of a plain, substantial character, of local grey bricks, with Ruabon-pressed brick strings and dressings. The main building is intersected by a corridor running the whole length of the building, on each side of which the various rooms are situated. Near the administrative block is the isolation or private ward pavilion, for the reception of private patients, or for treating cases the nature of which has not

already developed. It consists of four small wards, each of two beds; between each pair of wards is placed the nurses' room. The ordinary ward pavilions, of which there are now three, consist of male and female wards, each capable of accommodating six beds, and having a nurses' room between. There is also a receiving and bath room, in which the patient is received, and where the patient is also disinfected before leaving the hospital. Three separate classes of disease can be dealt with at the same time, giving two wards for each class of disease. A peculiar feature which Mr. Brownridge has introduced is the rounding of every angle and corner in the building, including ceiling cornices, door edges, window ledges, and, in fact, every place where ordinarily there would be a corner. This wonderfully facilitates cleansing. The sanitary arrangements are perfect, and the whole of the hospital is a model upon which others are certain to be based.

SIR JOHN TENNIEL is coming into "line" in the public rather than in the artistic sense. Whilst the other notabilities of *Punch* have shown the public their collected works in the medium in which they were made, Sir John Tenniel, the *doyen* of the staff and the most popular of all, has hitherto refrained from so doing. With a lively interest the announcement will be received that a selection of some 200 of the famous *Punch* cartoons will be exhibited at the Fine Art Society's, New Bond street, on and after the 30th inst., where, later on, will also be seen the works of the youngest member—Mr. Phil May.

It must be admitted that there is architecture in dress, especially in woman's. We wonder if the "profession" will reel, if we class the late Mr. Worth as an architect. At one time a Burgess of South Lincolnshire, he was subsequently the most important man in Europe, ruler of Fashion, that bigger empire than Russia. The Empress of the French never set out for a function of State until he had approved her costume, and Queens used to spend long hours in his consulting-room. We may look at his life from two very different standpoints. On the one hand he was industrious and obliging, and came to a fortune because of his strict attention to business. On the other hand, he was the great artist who insisted that dress should be something more than a mere wrapping—it should be sumptuous in style and at the same time expressive, or at least indicative of a personality. This was the secret that made Worth's a name of power.

HERE is a point for property owners and individuals who hold head leases. Mr. Justice Stirling has decided that they must not play "chemin de fer" at the "Argosy Club," for fear of endangering the head lease, which makes the playing of "unlawful games" on the premises a cause of forfeiture. The proprietor of the club argued that "chemin de fer" was not an unlawful game, but it has been made clear to his lordship that "chemin" is nothing but a variety of the evil thing "baccarat," and so an injunction is to issue. The judges come by some curious learning in the course of their experiences on the Bench. Here is a grave and dignified Chancery judge compelled by circumstances to master all the technicalities of the West-end gambling houses. Mr. Justice Stirling found it convenient to take from the middle of February to mature his judgment.

THE case between the frozen-out householder and the irresponsible water corporations and companies is worth emphasis. The water companies lay down their mains as they choose, and also the pipes that connect these with the water systems in each house,

at the cost of the owner of the house, but still according to their own scheme, allowing him no voice in the matter. They do the work and he pays for it. It seems to be ascertained scientifically that frost will not penetrate below a depth of three feet—at least not such frosts as visit this temperate climate. But in any case it is quite possible so to sink the mains that the water in them should have complete immunity from congelation. As a matter of fact, these mains are not always sunk to the depth of three feet—are sometimes not sunk to anything like that depth. Still, being of large dimensions and with a constant volume of water flowing through them, their risk is not so great. But the smaller pipes connecting these with the house cisterns are both more exposed and offer less resistance to cold, and in such frosts as we have had last month, get frozen and burst. The company's water is wasted, and the company have their remedy carefully reserved to them under their Acts. As they made the mistake (at the cost of the owner of the house) so they are allowed to repair it—at his cost also.

THE London Building Act would seem to have fallen into immediate disrepute. Even Sir John Bridge, who rarely goes out of his way to be denunciatory, can see no wisdom in it. He holds it unintelligible in most places and ambiguous in the rest. He therefore gave judgment against it. He found that the buildings of Messrs. Shoolbred, about which the case arose, are rather offices than warehouses. But that was not the surveyor's point, for he admitted that. His real point was mathematical and concerned "diagonal lines, horizontal lines, and a reference to $63\frac{1}{2}$ degrees." Possibly it was a question whether the line drawn from the extreme back line of the space behind the proposed building to the top of the said building, does or does not make an angle with the ground of $63\frac{1}{2}$ degrees at most. If it makes an angle of that, or less, the air space at the back of the building is obviously more than if it makes an angle greater than that.

It is a pity that Mr. William Allan, the latest "marine boiler" authority, speaks so rarely in the House of Commons. His speech, on the apparently unattractive subject of water-tube boilers, was a bright spot in an otherwise sober evening. The few members who were in the House at the time obviously enjoyed the unexpected interlude, and whenever Mr. Allan showed signs of stopping cheered him on. The interest of the member for Gateshead in the subject of boilers is two-fold. In the first place he is by profession a maker of marine engines and boilers, and secondly, he has the recollection of a youth spent in the engine-rooms of blockade-runners in the American Civil War.

SOME of the slums in the sanitary district of St. Pancras are centres of disease and veritable plague-spots. The death-rate in Somers Town is higher than at any other part of St. Pancras. It has been recommended by a specially appointed Committee that the Housing of the Working Classes Act should be put in force. Mr. Purchase held that the County Council had proved wholly indifferent to the public health of St. Pancras for two years. The state of this Somers Town area, particularly Church Way, was a scandal to any public body professing a zeal for sanitation. From this plague-spot in central London disease had spread to other parts of the Metropolis. A resolution was adopted at a meeting of St. Pancras Vestry "protesting against any continued delay in the furtherance of a scheme for the improvement of the Somers Town area."

A COMPETITION, promoted by the German Emperor for the encouragement of German sculptors, is hardly one which lovers of antique art can view with equanimity. A prize of two thousand marks is offered for the best restoration of the "Dancing Maenad" in the Old Museum of Berlin, and competitors are expected to replace "all the antique parts" which are missing in the fragment. The preliminary attempts of the restorers are to be made upon casts, which are to be supplied to them at a fixed price, but there seems a possibility that the prize winner may be allowed to exercise his ingenuity upon the original figure, which has already been tinkered more or less ineffectually. No protest against any such foolish misapplication of artistic capacity can be too strongly worded or expressed. We should not be surprised if the German Emperor succeeded where even Barnums fear to tread, but we cannot admire his recent footprints in Art matters.

ROTHERHITHE is waking up, and will now wear quite a business air, for the erection of a new Town Hall and Administrative Offices has been decided upon. The present office accommodation for transacting the business of the Vestry is of a very poor description, and the neighbourhood is very much in need of a public hall where meetings and entertainments may be held. The scheme which the Vestry has adopted will provide these two things. The accepted design for the Town Hall is that of Messrs. Murray & Forster, Adelphi Chambers, John Street. There were six competitors. The style of the building in the main front is Italian Renaissance. The architects have arranged to place the public hall on the ground floor, with the main entrance towards Moodkee Street. The hall is 52 ft. 6 in. long and 38 ft. 6 in. wide, and the original plan shows a handsome corridor running round three sides, and provision for four emergency exits. The Administrative Offices of the Vestry are also on the ground floor. The Vestry Hall occupies the first floor, and is a handsome room of 50 ft. by 30 ft. There is a public gallery, and several rooms intended for the use of committees, and a coroner's court.

MANCHESTER figured prominently in a discussion which took place at the Sanitary Institute, London, on the subject of back-to-back houses. The subject was introduced by Dr. Niven, the medical officer of health for Manchester. He dwelt upon the various points in which houses built in back-to-back blocks violate hygienic principles, and described what the authorities in Manchester have done and are now doing in regard to them. His address—a careful and discriminating one—amounted in effect to a strong and practically unqualified condemnation of the back-to-back system. It was illustrated with graphic representations of various types of back-to-back houses met in practice, and the methods adopted for dealing with them. The excellent drawings, plans and sections used for this purpose were contributed by Mr. T. de Courcy Meade, city surveyor of Manchester. Sir Francis Sharpe Powell, M.P., who presided, paid a high tribute to Dr. Niven, and denounced it as a discredit to the Leeds Corporation, as well as a disgrace to Parliament, that legislative powers should have been sought and obtained so recently as 1893, to allow the further erection in Leeds of back-to-back houses, which he stigmatised as an abomination.

THE ceremony of laying the foundation stones of the hostel for women students in connection with the University College of Wales, Aberystwith, was performed by Lady Hills Johnes, who took the place of Lady

Aberdare, and also fulfilled a like function on her own behalf. An interesting procession was formed at the college, headed by the town band, and including the borough police and fire brigade, members of the College Council and Court of Governors, the Mayor and Corporation, the members of the school board, the governors of the intermediate schools, clergy and ministers of religion, teachers of secondary and elementary schools, the members of the college staff, and past and present students. The hostel is being built, at a cost of over £15,000, on Victoria Terrace. It will have a frontage overlooking Cardigan Bay, facing the west, and will be sheltered from the easterly winds by Constitution Hill, which rises some 500 feet to the north-east of the promenade. At present accommodation will be provided for about 150 women students, but as there are now nearly that number in residence at the temporary hostel, increased accommodation will have to be provided at an early date. Owing to the death of Lord Aberdare, the president of the college, the ceremony of laying the foundation stones was postponed to yesterday from St. David's Day, and yesterday Lady Hills Johnes, of Dolancothi, took Lady Aberdare's place in laying one of the stones, and also performed a similar ceremony on her own behalf. The other two stones were laid by the wife of Principal Roberts, on behalf of Mrs. Wynford Philipps, who had to preside over a Liberal women's meeting at Cardiff, and by Mrs. Jessie Williams, wife of the senior inspector of schools. After the ceremony, a public meeting was held in the assembly rooms of the temporary hostel, when Colonel Davies Evans, Lord-Lieutenant of Cardiganshire, presided, and speeches were delivered by Principal Roberts, the vicars of St. Michael's and Holy Trinity, Aberystwith, Lady Hills Johnes, Mrs. Williams, the Rev. T. Leevi, ex-Moderator of the Calvinistic Methodist Assembly, Mr. Vaughan Davies, Miss Carpenter, the lady principal, and others. It was stated that a grant of £2,000 had been made from the Pfeffer fund towards the building of the hostel, that the Corporation had given the site for a nominal sum, that the remaining sum had been borrowed, and that between £2,000 and £3,000 would be required for furnishing which, the speakers were confident, would soon be forthcoming.

PROFESSOR W. C. F. ANDERSON, M.A., lectured last week before the Sheffield Society of Architects and Surveyors, on "Some Early Christian Antiquities (unpublished)." The churches he described were those discovered in 1893 and 1894 by expeditions in which he took part. The first was a rock-cut chapel in a mountain side about two miles from the valley of the river Maecustus, and three hours' ride north of the modern town of Bigaditch, in Mysia (Asia Minor). It is in a projecting crag which hangs a couple of hundred feet above the valley below. The rock is tufa, and in this is carved a church, with porch, chancel, and apse, and a side chapel. In the porch there is a rock-hewn tomb, and a similar tomb is in the north wall of the side chapel. The church is very small, not more than 40 feet long from the door of the porch to the apse. Yet all the features of a large church are imitated in this restricted space.

THE seats for the clergy with the bishop's throne in the centre run round the apse, the chancel is separated from the tiny nave by a triumphal arch, and the side chapel has a diminutive altar and credence table. Three crosses still remain over the inner door, and a much mutilated wall-painting in the chapel showed that the church was originally decorated with emblems. The church is evidently an early one, but there seems to be

no certain indication of its date. Similar chapels exist in Cappadocia and other parts of Asia Minor. Above the church is a small cell, also carved in the solid rock, which was probably the dwelling place of a hermit priest who had charge of the shrine. The other churches were two discovered at the old Roman town of Doclea in Montenegro. The larger was a Basilica, with an apse, a vestibule and a large court. It was paved with mosaic and was decorated with many carved capitals, screens and windows. A large number of rudely carved stone crosses point to there having been a number of altars besides the chief altar. The foundation of the seats of the clergy and the bishop's throne still remained—as did the platform on which the high altar stood. The date of the church was probably a little earlier than A.D. 500. The second church was much smaller, and was in the form of an elongated octagon. An inscription recorded that it was built by a lady called Ansonia.

THE three excellent little sketches of the clerestory at Waltham, the oriel at Haddon Hall, and the cresting from the nave roof of Swainsthorpe Church, are by Mr. Frederick Chatterton, the late pupil and present assistant of Mr. John P. Lee, F.R.I.B.A. Mr. Chatterton can make a clean and pretty sketch, and has the faculty of getting his perspective extremely accurate, which more than redeems the lack of strength in his pencil drawings. We should like to see more of this young architect's work.

MR. EDWIN O. SACHS has sent us advance sheets of his "Modern Opera Houses and Theatres," which will really be a beautifully illustrated treatise on theatre planning and construction; with examples selected from play-houses recently erected in Europe, with descriptive text. The work will be in three volumes, 23 in. by 16 in., bound in buckram, and altogether there will be no less than 220 plates, most excellently lithographed by James Akerman. All references on the illustrations will be made in English, German and French. The only thing about the work that at all trespasses upon our ideas of fitness is its price of £15 15s. to ordinary purchasers, or of £9 9s. to subscribers. As an actual matter of fact, the price is a low one, but to architects in this country somewhat prohibitive. The publisher—Mr. Batsford—announces that the list of subscribers will be printed in each volume.

THE Sheffield Art Crafts' Exhibition, which closed on Saturday night, has done something to revive interest in what was thought to be a lost art in Sheffield—we refer to wrought iron work. The craftsmen on the staff of Messrs. W. Hutton and Sons, under the direction of Mr. T. Swaffield Brown, deserve special recognition. The copper plaques by Mr. Brown, illustrating various phases of British sport were much admired. Mr. George Halliday's exhibits included "The Jester," and "Perseus with the head of Medusa" after Cellini. "Cupid and Psyche," by Mr. R. Douglas, another member of Messrs. Hutton and Sons' staff, was a study in bronze, and a panel by Mr. G. Halliday in repoussé, "The Judgment of Solomon," was also an excellent example. Mr. Thomas Shepherd's plaque, "Blackberries," showed merit. The clusters of the enticing wild fruit were in high relief and the leaves and flowers traced with much delicacy. George Webster had a plaque in copper gilt, containing panels on which were chased flowers and foliage. The Master of the Guild, Mr. C. Green, designed and modelled a canopy for a stove, manufactured by Crosthwaite, of Thornaby, that represented "More, of More Hall, slaying the Dragon at Wharnclyffe." An appropriate letter was received by Mr. Green, from Mr.

E. Onslow Ford, A.R.A., the Master of the London Art-Workers' Guild:—"Dear Sir, this morning I received the Sheffield papers, and the account of the opening of your exhibition made me feel very sad that I was so unfortunately prevented from being present. I am so glad everything went off so well, and that the exhibition is such a success. I hope you will some day give me another opportunity of being present at your Guild. There is one thing I should have said, had I been with you, and that is if any member of your Guild should be in London at the time of any of the meetings of our Guild, I, as master, will be pleased to receive anyone presenting himself at Clifford's Inn Hall with your introduction. I am glad to say I am able to get about again, but am feeling far from well." This letter of Mr. Ford's is full of right feeling.

DR. ROWAND ANDERSON, architect, writes with reference to the construction of the proposed hotel and offices at the Waverley Station. The circumstances, he says, connected with the competition and the decision of the directors had been so extraordinary, that he thought an explanation was due alike to the competitors, the architectural profession and the public. Apart from the competitor whose designs had been accepted, five architects of established reputation were invited to compete, and he was justified in saying that they all devoted much labour and expense to the preparation of their plans. It was freely stated to himself and others that they might save themselves the trouble of competing, as the result was a foregone conclusion. It was now abundantly evident that the designs had not been carefully considered. By whatever process the decision of the directors was arrived at, it certainly was not reached by the only proper course of considering each set of plans in detail, and comparing them with each other. The directors could have entrusted the work of designing the building to any person they pleased, without going through the solemn farce of inviting designs. Having invited competition, they ought surely to have allowed a decent and sufficient interval for adequate consideration of the designs to elapse before announcing their decision.

THE PROPOSED NATIONAL INDUSTRIAL UNION.

AT a meeting of the provincial committee of the proposed Industrial Union of Employers and Employed, appointed at the preliminary conference, Mr. R. A. Hadfield, Sheffield, presided, and amongst others present were Messrs. Daniel Jones, employers' secretary, Midland Iron and Steel Wages' Board; T. B. Johnston, Bristol; W. L. Robinson, West Bromwich; Stuart Uttley, Sheffield; E. Trow, Darlington; W. Johnson, Warwickshire Miners' Association; and A. H. Quance, hon. secretary, employees' section. Reports were presented showing encouraging progress, and it was announced that the inaugural conference in London would be thoroughly representative. From the United States and elsewhere communications showed that the movement had aroused a keen and widespread interest in industrial circles. It was resolved that the provincial Committee was justified in proceeding to establish the Union, and it was decided to hold an inaugural conference in London in June next.

MESSRS. MURRAY & FOSTER's design has been selected for the new Rotherhithe Town Hall, the cost of which is not to exceed £15,000. The building consists of a vestry hall; committee room; public hall; clerk's, surveyor's, medical officer's and sanitary inspector's offices; with the usual accessory apartments and caretaker's quarters.

The Builders' Journal.

MEN WHO BUILD.

No. 6.

Mr. ROBERT W. EDIS, F.S.A.



EIGHT-AND-TWENTY years ago, Robert Edis called in his friend, Henry Stacy Marks—not then a Royal Academician—and between them they devised and executed the friezes that are one of the charms of the architect's well-known house in Fitzroy Square. In the dining room on the ground floor, which also serves as a reception room for those guests who can appreciate a collection of lovely china a little more perhaps than they can the working drawings of a new country house, are a goodly collection of Shakespearean proverbs. "The friends thou hast and their adoption tried, grapple them to thy soul with hooks of steel" is one of them; and another "Welcome ever smiles and farewell goes out sighing." It hardly wants, therefore, the manly physique and fine hearty voice of the Colonel of the "Artists" to put you on good terms with the delightful architectural drawings, which dispute with the Nankin china, the Etruscan pottery, and the Kaja ware, for pride of place in your affections.

"Terra-Cotta," or the use of it, has caused a mighty breach in the camps of architecture. Many there are, who say it is the damnation of art. Robert W. Edis follows Alfred Waterhouse in his opinions, and goes on using Terra Cotta from year to year; and like the great Master of planning, he has developed into a Terra Cottaist of a very determined nature. Were you to ask Mr. Edis why he uses Terra Cotta, he would perhaps put it, because it is absolutely the best material outside of granite or marble to withstand the climate of the country. He would no doubt ask you what you thought of the Certosa at Pavia and the beautiful examples of Terra Cotta buildings in northern Italy, and then he would—or could—go deeply into the question of the art side of the material and add many startling facts to a controversy over which you possess a perfectly open mind. Certain it is that the revilers of Terra Cotta will have to get in front of some remarkably fine buildings in London alone before they can establish their convictions. The Natural History Museum, by Mr. Waterhouse, is no doubt the finest, and had that building, as we see it now, been executed in stone, it would have merited but a very small atom of the praise one is glad now to shower upon it. Mr. Edis points out many requirements of good work. The blocks used should be small, and he does not believe in the artificial colouring of the clays. He thinks with you that there is an enormous amount of very inferior material—inferior in its manufacture—used, which should be rejected by the architect.

Robert W. Edis has hewn his way up the rocks of architectural practice, step by step, by his own intense personality. He was born at Huntingdon six and fifty years ago, of a good yeoman strain. The local Grammar School and the Brewers' Company School, at Aldenham, gave him somehow the germ of architectural appreciation, fostered straight

away by a London firm to which he was articulated. Being six feet two in his stockings he had the pluck at two and twenty years of age to get married, and begin practice in Lincoln's Inn Fields the same year. The following year (1862) he became an Associate of the Institute, and proceeded to full fellowship five years later. It was in 1859, however, that he struck a very lucky vein in joining the Artists Corps of Volunteers, and it is still a doubtful question whether the study of volunteering or architecture do not run side by side in his ambitions. During the young days of practice Robert Edis was steadfast in his work, allowing himself but one weekly visit to the Hogarth Club, where he gained the friendship of Street, Dante, Gabriel Rossetti, Robert Martineau, and Val Prinsep.

Early in his professional career, Mr. Edis joined the Architectural Association, worked



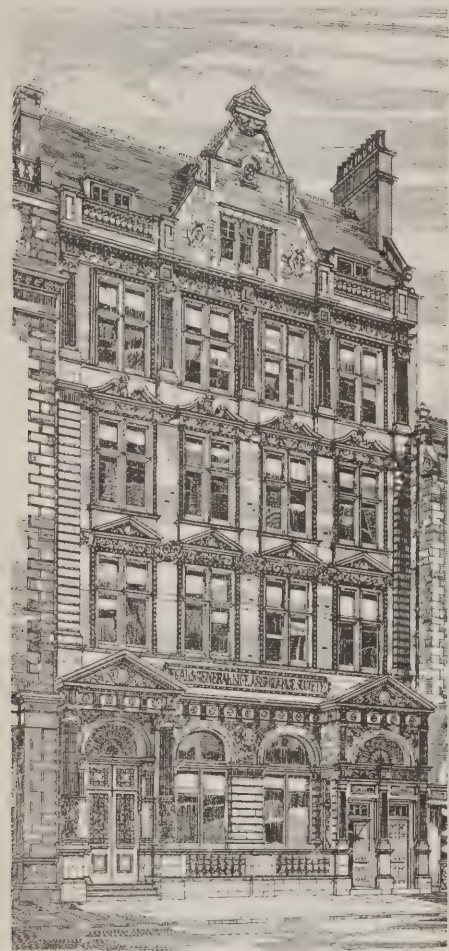
hard in its classes, metaphorically took his coat off and bared his arms when work demanded it, and naturally becoming its President a little later, was re-elected to serve a second year. During his years, Robert Edis has found time and inclination to do an enormous amount of travelling. He has shot big game in the Rockies; has laid low a king of the forest in Africa, has killed the Moose in Norway, and "floated" a fly over half the rivers in Europe. But wherever he went, with gun or rod, on shanks' pony, or on Arabian steeds, Robert Edis has always had a "canvas back" in his coat pocket, and when sport has failed, art has come in to make him recompense, and many's the time he has sketched a "spot" in revenge for the game he has not killed.

As an architect, Mr. Edis is known in London more particularly for his Senior and Junior Constitutional Clubs. The exterior marble work of the Junior, in Piccadilly, owes its existence to a very happy fact. A Norwegian once called on Mr. Edis to invite him to inspect some marble quarries situated on the banks of the Ofoten Fjord, and produced samples of the stone. Mr. Edis pronounced against the samples and refused the commission. Several years later, the quarry owner called again with another sample, from another quarry only just opened up, and Mr. Edis was delighted. He proceeded to Norway with all haste, and



NEW CONSERVATIVE CLUB, GLASGOW.—MR. R. W. EDIS, ARCHITECT.

the marble work on the elevation of the Junior Constitutional Club in Piccadilly is the result of his visit. He considers



A FLEET STREET FRONT, BY MR. R. W. EDIS.

the material equal in every respect to Pavanazzo, or any other of the Carrara brand, and the price is very much less. All over the country Robert Edis has done some of the best domestic work. He built Byrkley Lodge for Mr. Bass, he has added a wing to Sandringham, enlarged York Cottage for the Duke of York, and is the consulting architect to the Prince of Wales. The Inner Temple Library bears the impress of his art, but the greatest house he has up to now been engaged upon is undoubtedly the Georgian mansion he is building at Chevely for Mr. Harry McCalmont, which will contain one of the finest halls and galleries in England. The new Conservative club in Bothwell Street, Glasgow, which has been quite recently completed, and of which you are able to give a perspective sketch, is an excellent example of Mr. Edis's methods.

If you want to lure Robert Edis into a chat about matters outside the pale of architecture, you have to entice him into his own room in Fitzroy Square, and get him to smoke a cigarette upon his own hearthrug. He has no love for the rising eccentric school who are wasting themselves on architectural gymnastics and prostituting all the teachings of the ages. He does not love the pretty sketcher—the man who knows next to nothing of construction. "If," said Mr. Edis, "you build a prettypalace in which the chimnies smoke and the pipes burst, then

the designer is wanting in the first elements of architecture, for he does not know how to build." For a prominent man in his profession Robert Edis is, perhaps, the most conscientious in his work, for he labours with his own hand upon every commission. All plans are made by himself; the elevations and sections are worked up with pencil, and all important details go upon his board. Needless to say, the Colonel of the "Artists" is a stickler for duty. Every morning a sergeant comes over to his house with letters and for instructions of the day, and twice a week the Colonel spends some hours in the orderly room at headquarters. There he can draw his martial cloak around him and think of the days he served as aide-de-camp to Lord Bury during the Franco-German war, and of the days of the Commune, when he remained in Paris and witnessed all the terror of those times.

To the members of the Institute Robert Edis has read many papers, more particularly dealing with the decoration and furnishing of town houses. He has published a few books upon the same subject, has had the courage to become a London County Councillor, and the pluck to withdraw. Many persons hope to see his six feet two of manly presence on the benches of the House of Commons, but there are others, yourself among the number, who can see better work for so able an artist, outside the hot-beds of political intrigue. When the demands of a big practice allow him a moment's rest, Robert Edis can find what he wants at his delightful little Georgian home in Norfolk, where peace is the keynote of existence, and happiness and contentment the reward of a busy and conscientious life.

The Grimsby School Board on Wednesday night decided to build additions to existing schools giving accommodation to 1,130 children in the Weelsby district. At the same meeting the tender of Messrs. Illingworth, Ingham & Company, of Leeds, for the furniture and fittings for the Wintringham Higher Grade School, at a cost of £1,132, was accepted. The estimate was £1,049.



AN INTERIOR SKETCH, 1863, BY MR. R. W. EDIS.

ARCHITECTURAL ASSOCIATION.

MR. J. W. SINGER
ON
"IRON AND BRASS."

*We were furnished with advance proofs of Mr. Singer's paper, which we consider of so much interest that we shall print abstracts from it in our current and forthcoming numbers.

A MEETING of the Architectural Association was held at 9, Conduit Street, on Friday, Mr. E. W. Mountford in the chair. There was not a very large attendance of members. The minutes of the last meeting having been read and confirmed, a vote of thanks was passed to Mr. James Brooks for conducting the A.A. members over All Hallows Church, North St. Pancras, on the 2nd March. Similar votes were also passed to Mr. Shaw and Mr. George Sherrin for conducting members over the Brompton Oratory, on the 9th March. The following books had been presented to the library:—"Transactions of the Exeter Diocesan Architectural and Archaeological Society," vol. I. (new series), presented by Mr. C. J. Tait; and "Academy Architecture, 1892-94," presented by Mr. A. Koch; and a vote of thanks was passed to the donors.

Mr. J. W. Singer then delivered an exhaustive and interesting address on the subject of "Iron and Brass." He said:—"The two metals, iron and brass, are widely different in their qualities and characteristics. The former has been known from almost the early dawn of civilization, while our knowledge of the latter dates from comparatively recent times. Iron is one of the strongest metals, brass one of the weakest. Iron is nearly everywhere in nature, aërolites being almost pure iron; even the stars showing it through the spectroscope; and it forms about one-twelfth of the crust of our earth. Its particles are mingled in the dust of our roads, in the air we breathe, the water we drink, the food we eat, and is the great colourist of nature, giving the red colour to our blood. It is difficult to define when iron was first used in England, it having been questioned whether the Ancient Britons made use of it, but they worked in gold and silver, and Cæsar states that they had iron bracelets. Yet it is unknown whether the scythes which they attached to their chariot-wheels were of bronze or iron. For many centuries before Christ, and for fourteen centuries after, little progress was made in producing iron from the ore, the Hindoo, three thousand years ago, making iron and steel which cannot even now be surpassed, as they took the finest ore, free from phosphorus and silicates, and melted them with the best fuel, continuing this from four to eighteen hours, the soft composite mass being then rapidly separated from the cinder by hammering and reheating. A mild steel was produced by melting this bloom with charcoal, and thus was made the Wootz steel which Porus offered to Alexander as a precious tribute, and exactly the same process is carried out there to-day. We in our land of plenty, as regards iron, have but little idea how this metal was valued by our ancestors, and even in the sixteenth century iron had a price that it is now difficult to realise, and which I am able to illustrate from the records of the parish church of my native town. In 1574, the effect of the Reformation brought about a great change as to the furniture of the church, a more simple rubric being demanded, and for that reason many things, such as copes, crosses, and candlesticks, were sold. The churchwardens entered in their book of accounts of our church the results of that sale, and there appears, amongst other items, the disposal of sundry bars of iron. We see that they received for thirty-seven pounds of iron 3s. 1d. Money was then at least twenty times its present value, and at this estimate iron was then worth quite £180 per ton, or 1s. 8d.

a pound, instead of its present price of about one penny. I presume that everyone knows the first process of now making iron, it being simply to put the ore in a lofty furnace, with coal and limestone, so as to slowly melt the ore; the great effort being to see how little coal can be used for each pound of iron produced. Thus, in all rude attempts by a savage race, and even by the Romans to produce iron, they used eight pounds of charcoal for every pound of iron gained, which was a costly method. The next invention was the Catalan forge, which produced one pound for every $3\frac{1}{2}$ pounds of charcoal. To this succeeded the Jersey or Champlain forge, when $2\frac{1}{2}$ pounds of charcoal produced a pound of iron, this method being even now used in America and Spain, where wood can be easily procured. By all these processes the metal was not fully melted, but came out in a pasty form, which was at once hammered, and became good wrought-iron. The result of cast-iron was brought about by increasing the height of the furnace to gain heating power, it being then found that the iron was melted, becoming highly carbonised, and pig-iron was produced, which was of little use until the way was found of decarbonising the pig, which was done by the puddling furnace. The first application of iron for every purpose, whether for use or decoration, was undoubtedly in the form of wrought iron, such as produced by hammering, great perfection having been gained both by savage tribes for their weapons of war, and by the smiths of the eleventh and twelfth centuries, as may be seen in the well-known hinges on the doors of Notre Dame Cathedral. So excellent is this work that it has been seldom equalled, considered either in its massiveness in some parts, as compared to its delicacy of treatment in others. South Staffordshire has always been the field where first-class iron has been long produced, but it has yet to yield the palm to South Yorkshire for iron of the very highest excellence, especially to the Lowmoor Company, who possess a vein of highly carbonaceous coal combined with rich ironstone, which enables them to produce iron of the finest quality, but the price has always placed it beyond general use, it being three times dearer than several other brands. Although Dud Dudley, in the reign of James I., discovered the process of melting iron by means of coal made into coke by means of which there is no smoke, and thus surpassing his rivals both in quantity and quality, yet the secret died with him, and as late as 1740 the output of iron in Great Britain was only 17,420 tons. Up to the early part of the last century all iron bars were produced by the slow process of hammering, at that time the slit rode trade being entirely in the hands of the Swedish and Russian makers, when a young man, named Foley, who was convinced of the fitness of the iron of his district, determined to find out the process abroad, and being a good musician, he dressed himself up as a peasant of the country, and, taking his violin, travelled the country as a wandering minstrel, getting access to many of the foreign works, and then returned, rejoicing that he had found the secret of slit rod-making, at once commenced working near Kniver; but repeated efforts only resulted in failure. Still, not discouraged, he started again on his old tour to find out where he was wrong, and discovered that all was right excepting that he had omitted to put water on his rollers when working them. He again returned and successfully started the great horse-shoe nail trade, which has employed thousands of people, until their work was replaced by machinery. The Sussex foundries were so famous in the seventeenth century because, like the Swedish makers, they only used wood as fuel, and as the wood became scarce, that was the cause of these foundries vanishing from the land. It

was from a foundry of that county that came the rails formerly round St. Paul's Cathedral, and some of them still remain round the statue of Queen Anne. This railing was cast in 1714, at Lamberhurst, and was removed in 1874. I may mention that a part of this same railing is now lying in a stable-yard of a gentleman's house near Frome. As the modern system of very high furnaces only turns out cast-iron, called "pigs," and is very brittle, hence arose the puddling furnace to convert it into wrought-iron, by which action fire and air act as solvents to remove the sulphur, carbon, and phosphorus—which may be in the cast-iron according to the fuel used—the sulphur coming from the coal, the phosphorus from the ore, and the carbon from both. The primary stage of puddling is to melt the charge of white or mottled pig-iron, the molten metal being well stirred or "rabbed" to make it uniform, and to incorporate the "fettle"—fettle being the throwing-in of ground oxide of iron, which has been worked to the consistence of common mortar. The temperature is then raised until carbonic oxide is released, causing violent bubbles with a blue flame, the rabbling process being done with a long iron instrument protected with refractory cement, until the blue flame ceases. Bright grains of iron appear, the size of shot, which is termed "coming to nature"—i.e., the nature of wrought-iron. Then the puddler reduces the heat and begins to ball the iron into lumps of from 60 to 70 lbs., which are then ready for the hammer or the rolls. This process gives the iron a kind of fibre, making it less likely to snap. Another treatment of cast-iron is to make what is known as malleable iron, first used at the beginning of the century, and is essentially cast-iron made flexible by the process it goes through of annealing. The best Cumberland ore is required, and when the castings are first made they are hard and brittle. These are placed in pots, surrounded by ore of the same kind as the castings were made from, and are then subjected to heat for about a week, a conversion then taking place, like the formation of steel, the pot taking about three days to get to a white heat, which is kept up for twenty-four hours, and then for another twenty-four hours is allowed to die out, the castings being then ready for use. My paper being upon iron, it is not necessary to treat of steel, but it may be mentioned that iron and steel differ chiefly in the carbon which is mingled with the pure iron molecules—wrought iron containing little carbon, steel some, cast-iron more. This is most of the story, but, of course, not all. Thus, steel can be produced by taking carbon from cast-iron, or by adding carbon to wrought-iron. Wrought-iron is almost the only metal that can be welded together, which means that when brought to nearly a melting point, which is known by the sparks coming from the fire, and after some silver sand has been thrown in the fire to prevent oxidization from the air coming to it, by great quickness of action the two parts are brought together, and by smart hammering they become united in one solid piece. It is this quality which gives to wrought-iron its great charm as a metal for ornamental work, a charm that is all its own, and enables the smith to produce work which can be carried out in no other metal. No metal so repays a skillful workman as wrought iron, and in no other material is, I think, the distinction so evident as the stamp left upon it of good or bad treatment."

At the conclusion of the lecture the Chairman invited a discussion on the lecture.

Mr. Garbutt proposed a vote of thanks to Mr. Singer, and said the subject he had treated was a gigantic one. What puzzled him (the speaker) was how the Orientals managed to produce such huge bronzes and big cannon, some of which threw shot

of about 18 inches diameter. He heartily agreed with Mr. Singer in saying that it was a pity bronze was not more frequently used in place of brass. The possibilities of bronze were practically unlimited. In that metal there was such a fine variety of colour. It kept its colour so much better than brass, and the cost was not very much greater. He referred to a process which the Japanese had of making an artificial surface on brass in any colour, which had a wonderfully lasting character and required no lacquering. It could be applied to a great many of the smaller objects, such as hinges, door fittings, &c., and a great many decorative purposes. He asked Mr. Singer if he could explain how it was done.

Mr. Singer replied that he was afraid the secret was not known in England.

Mr. J. C. Stockdale seconded the vote of thanks, and said a paper of this kind was of some assistance to them in designing buildings, because if they bore in mind that a metal like brass had to be lacquered to keep its colour, it would perhaps deter them from using it in ways. He remembered seeing in a house some stock locks of lacquered brass. They were of very handsome but rough design, full of excrescences, so that the servants could not polish them, and every time they wanted cleaning they had to be taken off and sent to be re-lacquered. If they were to use bronze instead of brass, the question was, could they use it for repoussé work, or was it too brittle? With regard to wrought-iron, there were certain things that had to be borne in mind in using it. It was so easy to get an effect on paper, but it was so different when it came to be carried out. They had to be very careful how they introduced square and circular sections.

Mr. Satchell supported the vote of thanks. He thought in the use of bronze in tablets in buildings much might be done, especially if it were possible to obtain a lettering in the brass tablet which could be seen. There seemed to be a difficulty in obtaining any lettering which could stand, unless one went in for the very costly process of gilding. Then, as to the lacquering of brass. Certainly, for domestic articles, though there were artistic objections to it, yet what was the practical objection to it if they wanted an article for daily use? He thought a good lacquer was very much needed for the brass work of fire-places, and asked if there was any way of specifying it or ensuring that it should stand. With regard to wrought-iron he asked why the old wrought-iron, such as was used in grilles in convents, &c., should seem to stand so much better than the modern metal, a great deal of which, after it had been fixed for a few months, looked very shabby and rusty indeed.

The Chairman said one thing that puzzled him was where Moses got the brass to make the brazen serpent with; it must have been rather scarce about there. (Laughter.) Mr. Singer had made reference to the Sussex foundries which brought to mind the fact that there appeared to be some chance of their being restarted if the coal that they were digging for turned out to be any use. He did not know that it was altogether to be desired, because at present Sussex was a very beautiful country, and the possibility of it being turned into another Sheffield was too dreadful to think about. With regard to Mr. Singer's reference to screens, he must say that he never saw anything in a church satisfactory in the form of a screen of iron. Wrought-iron was all very well for grilles and such like, and though Sir Gilbert Scott and Mr. Pearson had put up some very fine ones, he could not say he admired them. The work seemed to be too light and too fine, and, in one instance which he had in his mind, it seemed to him they might as well have done without the screen and saved the money.

Mr. Singer, in reply, said first of all that

he was afraid he was not competent to say where Moses obtained the metal with which to make the brazen serpent. With regard to what the chairman had said about screens, of course it was not his (Mr. Singer's) place to speak upon that subject. It was entirely within the scope of the architect, but the fact of being able to make a screen so light, was, he thought, the very beauty of a screen. It was as strong as a wooden one and only one-tenth the substance. It did not obstruct the light, and the architecture was not interfered with in any way; while a wood screen shut out everything. With regard to the questions about lacquer, that of course was only a thin transparent varnish put upon a metal, and as long as it remained on the metal kept its colour. Lacquer came off very quickly in a damp place, and the metal then became dark, tarnished and streaky. It was really impossible to make bronze keep its colour out of doors, or to case the metal with any substance that would prevent it oxidising in the open air. All the principal statues in London might just as well be iron for they were perfectly black. In Bristol there was a bronze statue over 100 years old which had a beautiful colour. For repoussé work bronze was as good as brass, but copper was better than either. It was a softer metal and stretches more easily, and for that work was the best metal that could be used, except gold. In reply to the question as to the shabby appearance of modern wrought-iron work, Mr. Singer pointed out that there was a great difference in the price and quality of iron, and that iron at £20 a ton would stand better than iron at £7 10s. a ton. The meeting then closed.

Mr. Singer exhibited several specimens of iron and brass work, notably some heads of ancient Italian processional crosses, and some beautiful modern wrought-iron and brass, electroleirs, &c. There were also shown some exceptionally fine rubbings of ancient monumental brasses.

AN ART OF WHICH ENGLISHMEN SHOULD BE PROUD.

MR. JOSEPH PENNELL ON WOOD ENGRAVING.

THE art of wood engraving is an English art, says Mr. Joseph Pennell in a morning contemporary. But the fact that it is an English art is nothing to me. I should not care a jot or a tittle if it were French, German, or American, so long as it was great, so long as it was living or vital. But as it is English, Englishmen should be proud of it, for it has set the fashion to the world. Or rather, it has set not the fashion, but a standard of great art which the whole world has been only too glad to follow. It was but a few years after Bewick, a great artist who happened to engrave his designs on the wood block instead of drawing them on paper or engraving them in metal, had issued his masterpieces, that they became known first in France, where artists were more than ready to draw upon the wood and allow other artists to engrave the designs they had so drawn, and thus escape from the tyranny of the formless and unsympathetic engraver upon steel. It is to another Englishman, Charles Thompson, that French wood engraving owes its origin. When he went to Paris, in 1817, he found an army of artists and a phalanx of publishers willing to aid him with their art and their pocket-books in order to produce that series of books published in the French capital, which one day will be ranked with the wood-cuts of Dürer and the etchings of Rembrandt. From France, the English art of wood engraving spread to Germany, where its possibilities were at once appreciated by Adolf Menzel; even earlier it had penetrated to the United States, where it was taken up by Dr. Anderson, to whom, as Mr. Linton says,

belongs the honour of being the first engraver on wood in America. It was not twenty years ago, as usually asserted, that the American school of wood engraving arose, but one hundred and one. From that time until the present, the English art of wood engraving has flourished and advanced. It may be well, therefore, for me to say just what wood engraving is. It is the art—the English art, be it always remembered—of cutting with a graver (exactly the same tool used by metal engravers for centuries) a design upon a cross section of boxwood, so that this piece of boxwood, or a mechanical reproduction of it, known as an electrotype or a stereotype, may be placed with ordinary letterpress upon a printing machine and duplicated by hundreds of thousands of copies. And this fact that a wood engraving can appear along with type is what has given it its importance and its position amongst the graphic arts. Before the time of Bewick, and even for some thirty or forty years after, that is, until about 1840, steel engraving and mezzotint were the methods usually employed for reproducing pictures, or drawings, wood-cutting, as perfected by Dürer some three hundred years before—the art of cutting a design drawn on the flat side of a plank, with a knife or chisel—having virtually disappeared. A steel engraving, an etching, or a mezzotint cannot be printed with type; but a wood engraving can, and a skilful engraver can imitate, if he wishes, the better part of the qualities of the first two methods. Therefore wood-engraving became popular, and this partly owing to the fact that it was much cheaper. It was also more true, for the artist drew his design upon the box-wood, and the engraver cut it in into the wood, and the printer printed it. To it we owe those gems of art, Northcote's "Fables," produced in 1828; Harvey's "Arabian Nights," in 1838; France; and Anderson's copies of Bewick, brought out in America in the early part of the century. I might easily pass in review the wonderful engravings printed in Currier's "Paul et Virginie," in the same year in early numbers of the *Illustrated News*, which I have before me, the volume for 1850 being artistically far finer than anything produced under the present management. I might refer to the manner in which Sir John Gilbert, Birket Foster, Samuel Palmer, and Harrison Weir, among others, when they were engraved by Vizitelly, Andrews, the Orrinsmiths, continued the traditions of Bewick. I might speak of the designs by Rossetti, by Burne-Jones, by Sandys, by Whistler, by Millais, Walker and Boyd Houghton, by Ford Madox-Brown, reproduced by Linton, by Swain, by Dalziel in Moxon's "Tennyson," and the *Cornhill* and *Once a Week*. It is true that at present the trade of wood-engraving is threatened by the cheapness of process-engraving, a state of affairs for which, to some extent, the wood-engravers are responsible. A few years ago they became so independent, like their predecessors, the wood-cutters of the fifteenth century, that they forgot the existence of the artist, and in consequence the artist rebelled against them. As a result the publishers, seeing that the artist did not like bad wood-engraving—the public knew nothing about the matter—and the good process costing them about a tenth as much, encouraged process. I shall not attempt to describe process, save by saying that it is a mechanical method of reproducing drawings which are made in line or in wash, and also that a mechanical reproduction of a line drawing is quite equal, and often superior, to the wood-engraving, and that the mechanical reproduction of wash-drawings is either greatly inferior or vastly superior to the wood block, according as the wood-engraver is an artist or a duffer. But, inferior or superior, it is vastly cheaper. And this cheapness, which means, of course, so much

saved by the employment of process, has played havoc with the average wood-engraver. An ordinary process block costs about one-tenth as much as the ordinary wood block, and it takes about one-tenth as long to produce. Therefore the ordinary publisher uses it, and the ordinary buyer of books accepts it. One is simply amazed at the unemployed talent in the art of wood-engraving which exists in England to-day. The reason that these artists' services are not in demand is simply because of the niggardly sweating system which has crept into the English trade of publishing.

PROFESSIONAL RULES.

THE Boston Society of Architects has prepared, says *The Building News* in its current issue, a "code of ethics" for its members, which has been adopted by the Society. It comprises sixteen sections, embodying principles that have been generally accepted, though not invariably observed, by the profession. Many of the rules will be usefully considered by architects on this side of the Atlantic. We have no space here to give the rules *in extenso*, but may allude to two or three of the more important. Section 1 precludes a member from entering into partnership with any builder or contractor; section 2 provides that a member owning any building material or invention proposed to be used on the work for which he is architect should inform his employer of the fact. Section 5 observes it is unprofessional to offer drawings on approval and without adequate compensation; section 6, that it is unprofessional to advertise in any other way than by notice giving name, address, profession, and office hours, and special branch of practice; section 7, that it is unprofessional to make alterations to a building designed by another architect within ten years of its completion, without notice to the said designer. Section 9 declares it to be unprofessional for a member to criticise in the public prints the professional conduct or work of another architect except over his own name or under the authority of a professional journal. The other sections refer to the unprofessional attempts to supplant an architect after steps have been taken towards his appointment; to furnish designs in public or private work unless for proper compensation; the observance of a schedule of charges as a minimum rate, and by charging higher rates whenever necessary; to take work at a lower rate than another, &c. The rules contain nothing but what every respectable architect will readily accept, though some of them are shamefully transgressed in practice, simply because there is no written law binding on the profession. Thus how often architects are willing to furnish designs for work without remuneration, and to undertake to do work at a lower rate than a brother professional—practices very derogatory to a professional man, and acknowledged in theory to be wrong. When these irregularities are made the subject of explicit rules, few will be disposed to disobey them.

OWING to the overheating of a slow combustion stove, an outbreak of fire occurred early yesterday morning in the Garrison Library of the Cambridge Barracks, Portsmouth. The barracks are occupied by a detachment of the the Royal Artillery. The fire was got under within an hour, and was confined to the library.

WE understand that Mr. Grainger Heiton is completing plans for the restoration of St. John's Church, Perth, showing alternately the throwing of the east and middle churches into one, and the improvement of the middle church on the footing of the churches remaining separate.

ARCHITECTURAL IRONWORK: CONSTRUCTIVE AND DECORATIVE.

A Series of Instructive Papers for the
Artist and Worker.

CHAPTER IV.

STANCHIONS (continued).

CONTINUING the remarks upon stanchions and such like members, which are now cast in much larger sizes than was formerly the case, it may be here mentioned that, if the distance to be covered is too great for one casting, joints are sometimes permitted, though these are not often rendered necessary. In such cases the joints may be made about half-way up, or equidistant. In this eventuality the ends of both portions of the stanchion must be carefully planed or turned up true, and the flanges which terminate them securely bolted together, as shown at Figure 8 (*ante*). With regard to the load-bearing ability of stanchions opinions differ among those authorities to whom we look for information in the matter. Thus Mr. Henry Adams says, with respect to the relative strength of columns and stanchions, that "a stanchion of + section is much less economical than a hollow cylindrical column as far as the use of metal goes. For instance, a cylindrical column of the same external diameter as the stanchion, and containing the same sectional area, will have nearly double the strength. There are, however, advantages in certain cases in employing stanchions." Mr. Adams gives the following tabular statement of the approximate safe load on columns and stanchions, and for supplements to and comparison with those previously given will prove useful:—

"Up to 10 diameters long = 5 tons per square in.	
From 10 to 15 "	= 4 "
" 15 to 20 "	= 3 "
" 20 to 25 "	= 2 "
" 25 to 30 "	= 1½ "

"For permanent structures," says the same authority, "when these figures are used some allowance for contingencies should be made."

As we have previously mentioned, the *formule* of the various authorities as regards the factor of safety differs very considerably, and this being so, we give below some of the highest and most representative, which should be made a note of by those more particularly concerned in this department of structural ironwork:—

Strength by Gordon's Formula.

W = crushing weight in tons.
s = sectional area in square inches.
d = diameter over arms in inches.
l = length in inches.

$$W = \frac{36 s}{3 l^2}$$

$$I + \frac{400 d^2}{400 d^2}$$

$$W \frac{36 \times 15}{3 \times 120^2} = 201 \text{ tons crushing weight}$$

$$\text{Safe load} = 201 \div 6 = 33.5 \text{ tons.}$$

By Timmin's Formula.

8" x 8" x 1" = 15 square inches area = 46.8 lbs. per foot run, and for 10 feet length, safe load = 20.1 tons.

By Box's Tables.

Breaking weight in tons:—

8" x 8" x 1" x 10 feet long = 261 tons.

$$\frac{261}{6} = \text{safe load of, say, } 43\frac{1}{2} \text{ tons.}$$

By "Lockwood's Engineers' Pocket Book."

Safe load in cwts.:—

8" x 8" x 1" x 10 feet long = 354 cwts.

$$\text{or } \frac{354}{20} = 17.7 \text{ tons.}$$

By Box's Formula.

$$Mp \times L \text{ 1.7 ft. } (6^{2.6} \times t) \div 2.6 \times b - t \text{ inches} = \text{B.W. tons by flexure}$$

which must not exceed one-quarter of the sectional area x ultimate crushing strength (cast iron equal to 42 tons) per square in order to provide against incipient crushing.

$$8^{2.6} = 223, 1^{2.6} = 1, 10^{1.7} = 50.1.$$

Mp. = constant multiplier for cast iron =

75 both ends flat

50 one end flat

25 both ends pointed.

$$75 \times \frac{(223 \times 1) + (1 \times 7)}{50.1} = 344 \text{ tons B W}$$

$$\text{but } \frac{15 \text{ square inches} \times 42 \text{ tons}}{4} = 157.5 \text{ tons}$$

which is the maximum efficient strength and safe load =

$$\frac{157.5}{6} = 26.25 \text{ tons.}$$

Herewith is a comparison of the preceding rules:—

Gordon's formula	.. ..	33.5 tons.
Timmins' tables	.. ..	20.1 "
Box's tables	.. ..	43.5 "
Lockwood's tables	.. ..	17.7 "
Box's formula	.. ..	26.25 "

It will thus be seen that the subject of stress, safe-loading and breaking is enveloped in very considerable doubt, and requires to be still subjected to further careful experimenting. We could supplement the foregoing with other tables, but those given will suffice as representative rules arrived at by authorities which can be trusted. And here we may note that Hodgkinson stated, as the results of experiments conducted by him, that a cast-iron pillar of + section, 3" x 3" x 48" and 7.562 feet long, both ends being pointed, broke with a pressure of 17,578 lbs., equal to 7.8475 tons.

The following useful table is extracted from that very reliable and useful handbook, "Lockwood's Builders' Price Book." This table shows the dimensions of cast-iron stanchions, 10 feet in height or length, and adapted to sustain loads of 1½ cwt., 2 cwt. and 4 cwt. per superficial foot:—

Dimensions of Stanchions.		Load in cwts.	Extent of Flooring.		
Thickness of ribs or flanges.	Diameter of circle which will circumscribe the sectional area.		Allowing 1½ cwt. per superficial foot.	Allowing 2 cwt. per superficial foot.	Allowing 3 cwt. per superficial foot.
Inches.	Inches.		super. feet.	super. feet.	super. feet.
1	4	40	268	20	133
1	5	77	513	384	253
1	6	128	853	64	423
1	7	191	1273	953	633
1	8	266	1773	133	883
1	8	354	236	177	118
1	9	452	3013	226	1503
1	10	550	3663	275	1833
1	12	959	6393	4793	3193
1	13	1,259	8393	6203	4193

With this table we think our remarks upon stanchions may terminate, as our readers should make further inquiries for themselves.

THE work in connection with the re-arrangement and improvement to the great Renaissance Church of St. Phillips, Salford, is about to be commenced, and will include, as funds permit, interior decorations in mosaic, fresco or painting. The plans were prepared last year by Mr. J. Medland Taylor.

THE Glossop Town Council, being anxious to purchase the Town Hall and Markets from Lord Howard, the Committee were recently empowered to make an offer of £9,500. Lord Howard, however, refused this offer, but said he was willing to accept £10,500. It has, therefore, been decided to abandon the project.

THE cost of the Marseilles and Rhone Canal is estimated at 80,000,000f., half of which is to be provided by the State and half by the city and the department. It will be 33 miles in length, including a tunnel four miles long.

A CASE UNDER THE NEW BUILDING ACT.

SIR JOHN BRIDGE'S CRITICISM.

MR. FREDERICK WALLEN, District Surveyor for the parish of St. Pancras West, appeared before Sir John Bridge last week to two summonses calling upon him to show cause why a decision he had arrived at with regard to the proposals of Messrs. Shoolbred to erect new buildings on a site they possess at the corner of Tottenham Court Road and Grafton Street, adjoining their other premises, should not be reversed. —Mr. J. P. Grain and Lord Robert Cecil appeared for Messrs. Shoolbred.—The case was one of the first under the new London Building Act, which came into operation at the beginning of the present year. Mr. Wallen, the District Surveyor, had reported that the plans for the new buildings submitted by Messrs. Shoolbred were in some respects in contravention of the new Act, and at the last hearing Mr. Grain argued at length that they complied with the Act in every essential particular.—Mr. Grain now resumed his argument, and mentioned that when the plans were first sent in Messrs. Shoolbred contemplated having something like a hundred sleeping apartments for their employes, but on the suggestion of Mr. Wallen that part of the plan was altered. No doubt Mr. Wallen was doing what he conceived to be his duty, but he (counsel) respectfully suggested that in this instance he was labouring under a mistake in alleging, as he had done, that the proposed buildings were of the warehouse class. The buildings would be of a magnificent character, and every precaution had been taken to guard against fire. The proposed buildings were, he contended, of a domestic class, and would therefore be treated differently to warehouse buildings.—Mr. Wallen said he was willing to waive and withdraw his notice as to the buildings being of the warehouse class. He would admit that they were, under the Act, domestic buildings, but he contended that, under Section 41 of the Act, sufficient air space was not provided.—Sir John Bridge asked Mr. Wallen if he understood the Section.—There was no reply until Lord Robert Cecil said that no one understood it when it was passed.—Sir John Bridge read a section, and said it was perfectly unintelligible. —Mr. Wallen: That refers to the plane of the line, Sir John.—Sir John Bridge: I am glad there is something plain about it. (Laughter.)—Mr. Wallen remarked that if Mr. Grain's contention were correct all the backyards in London might be covered with houses.—Sir John Bridge, in giving his decision, said he was glad he was not bound to determine this case on the construction of any of the sections of the Act that had been quoted, because almost all the sections of the Act seemed to him to be so drawn as to be perfectly unintelligible. Where intelligible, many were intelligible in two different ways, and capable of two different constructions. There was one point which was a matter of fact. He found as a matter of fact that the buildings were to be used principally as offices or counting-houses, and made an order setting aside the objections of Mr. Wallen as to Section 41, the other objections being withdrawn.—Mr. Grain mentioned that Mr. Wallen objected to being described as a person summoned to appear before the Court.—Mr. Wallen suggested that a notice instead of a summons would be quite sufficient, and it was understood that in future cases the word "notice" would be used.

THE Governors of the Llanelly Intermediate and Technical Schools have decided to advertise for plans and designs for schools to be erected at a cost of £5,000.

THE PROJECTED ALTERATIONS OF MANCHESTER CATHEDRAL.

THE glowing descriptions of the intended pile which, we are told, says a correspondent to a Manchester contemporary, is soon to arise between the present western end of the Cathedral and Victoria Street, whether those who provide the funds—i.e., the ratepayers—like it or not, seem to come from the pen of one who has not studied the site and neighbourhood of the Cathedral in any but a slight and superficial manner. It is suggested that we should have "a practising school for the choir," "a consistory court," and "a worthy ceremonial entrance." I agree that the present arrangements outside the west end leave much to be desired; but to lop off a large slice from the churchyard does not mend matters. What Mr. Basil Champneys proposes to do at the west

tising school for the choir of sufficient size to serve as a meeting place for the Easter vestry or other parochial or ecclesiastical gatherings; also a separate vestry for the clergy, a consistory court, and a dwelling house for one or more of the cathedral attendants. There might be also a crypt, if not for interment, yet to receive monuments of distinguished citizens. What I propose would go a long way towards giving to the old church a cathedral-like appearance. It would cost little more than the mere spend-money proposal, which, however well carried out in detail, has its foundation in a serious error of judgment.

MR. HUTTON, architect, of Kendal, is preparing plans for the new tramp ward which the Guardians of Sedbergh propose to erect at the workhouse.

Edward Bateman, Birmingham; Alfred Whitelock Field, Croydon; George Gunn, Ayr; Wilberforce Ernest Hazell, London; John Henry Price, Liverpool; Harry Tom Boden Spencer, London; George Augustus Bligh Livesay, Boscombe, Bournemouth; Alexander Paul Macalister, Cambridge; Thomas Harry Weston, Bristol; Henry James Wise, Gospel Oak, N.W.; Herbert Jeffrey Palmer, New Malden; Joseph Spain, Sunderland; Charles Septimus Errington, Newcastle-on-Tyne; Frederick Brice Hobbs, Waterloo, near Liverpool; Harry Wilson Pye, London; John Cadwallader Dewhurst, Belfast; William Edgar Gauld, Aberdeen; Robert William Horn, Glasgow; Vivian Herbert King, London; Alfred Henry Mills, Manchester; Thomas Aloysius Pole, London; George Patrick Sheridan, London; Percy Henry Adams, London; Harold Bailey, Hull; Percy Paovich Cotton, London; William



ENTRANCE GATES, EATON HALL.—MR. R. W. EDIS, ARCHITECT.

THE R.I.B.A.

A SPECIAL meeting of the Institute was held on Monday, the 11th inst., with the President in the chair, to move: "That, subject to Her Majesty's gracious sanction, the Royal Gold Medal for the promotion of architecture be presented this year to Mr. James Brooks, Vice-President, for his executed works as an architect." Mr. Charles Barry seconded the motion, which was unanimously carried. The following were subsequently elected members of the Royal Institute. *Fellows*:—Waterhouse, Paul, London; Henman, William, Birmingham. *Associates*:—Thomas Kershaw, Halifax; William Hodgen, London; Ernest Edward Fetch, London; Frederick Bligh Bond, Bristol; John Pain Clerk, London; William Edward Vernon Crompton, Wallgate, Wigan; Frederick Ernest Pearce Edwards, Liverpool; Henry Ernest Kirby, London; Charles

Adam Forsyth, London; Francis John Potter, London; Charles Henry Smith, London; John Borrowman, jun., London; Harry Ebenezer Budden, London; Frank Berridge Cooper, Leicester; Archibald Campbell Dickie, London; Samuel Stevens Dottridge, London; Arnold Seaward Tayler, London; Harold Edmund Church, London; Henry Ingle Potter, London; Alexander Robert Hennell, Forest Hill, S.E.; Allen John Pinn, Exeter; Sydney Benjamin Beale, London; Henry Ascough Chapman, Scarborough; George Coster, Bournemouth; Ernest Outram Cummins, London; Herbert Alfred Legg, London; George Oakley Scorer, London; Thomas Duncan Rhind, London; Luke Barlow, Manchester; John Laurie Carnell, Norwich; Hyla Edward Elkins, London.

SANCTION has been obtained by the Brentford Guardians to borrow £37,800 for an infirmary.

end would, however well done, add nothing to the cathedral-like character of the building. Whatever may be done should as far as possible help to change the old parish church into a real cathedral—the cathedral of one of the greatest and most important dioceses in the kingdom. It is clear that we cannot have the central tower of a cathedral, nor, very well, the twin flanking towers as at Exeter; but we might have, and I maintain that we ought to have, some of that picturesque grouping of the necessary or desirable buildings that go so far in giving to cathedrals at home and abroad their charm and fascination. The buildings that are wanted would take comparatively so little space and be of so modest a height that, if skilfully treated, they might extend into the churchyard on the south of the Cathedral without seeming in the least to crowd it. There should be a choristers' vestry and prac-

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

Extension of Patent Office.—Mr. B. E. Nightingale, of the Albert Works, has secured the contract of the new No. 3 Block of the Patent Office. Messrs. Mark, Fawcett & Co., of Westminster, are to construct the fire-proof floors.

Aspinall's "Wapicti."—A new washable distemper paint that can be manufactured in any tint, and which has been designed for application to plaster, stucco, brick, stone, cement, &c. It is capable of yielding good artistic effects by stencilling, and therefore adapted for livening up interiors by decoration, having a flat surface suited for the purpose. Among the advantages claimed for "Wapicti" are that on exterior work it dries with a surface impermeable to the most drenching rain, and can be used with advantage for farm dwellings, wooden or other houses, and general work on estates, that the effect obtained with it is far superior to that of flatted paint, and costs one-third less. It is very largely used for painting the walls of asylums, churches, hospitals, railway stations, schools, private houses, &c.

The Eccup Reservoir.—The Leeds Waterworks Committee received recently a report from Mr. Hill, C.E., on the work of the reconstruction of the Eccup Reservoir, a heavy undertaking which has been long in progress. Mr. Hill had examined the bottom of the trench, and approved of the work done. He agreed with the city engineer (Mr. Thomas Hewson) that the repuddling of the deepened portion of the trench might now be safely commenced. Brick side screen walls, he thinks, should be built on the reservoir side of the trench to protect the puddle. The total depth of the trench from the finished road level to the bottom is 170 ft., the length along the bottom 420 ft., greatest width at the top 26 ft., and average depth of shale taken out below the bottom of the old trench 39 ft.

Mr. Potter's "Concrete."—Mr. Potter sends us his voluminous work on Concrete, published by Mr. Batsford, as a new edition of an older work. But it is the standard book upon a really very interesting subject, and one Mr. Potter has made peculiarly his own. It deals, as many of our readers will know, of concrete as a material; of matrices; the making and mixing of concrete; concrete for artificial foundations; and the shrinkage of materials used in the making of concrete. These are merely the heads of the various chapters. Every actual use to which the material can be put is discussed and explained, and there are many illustrations to assist the reader. Mr. Potter's own system of concrete floors is fully described.

Business Announcement.—Messrs. W. E. Constable & Co., of Monument Chambers, King William Street, London, E.C., inform us that they have converted their business into a limited liability company, and that the firm will from now be known under the style of W. E. Constable & Co., Limited. The present partners—Mr. Sydney Constable and Mr. J. F. Weymouth, jun.—become joint managing directors, and in all other respects the business will be carried on as before.

The County Council.—Last June the Council resolved to erect, without the intervention of a contractor, a new station in place of the existing fire-engine station at Fulham, the cost of the work being then estimated by the architect at £10,500, and on June 26th, the Works Committee reported that it was satisfied with the estimate and specification, and was taking the necessary steps to carry out the work. Owing to circumstances which has been fully explained in previous reports, it has not been practicable until now to commence the work, and, the price of materials having in the meantime increased, the Works Committee suggests that the estimate needs revision. The architect has been consulted, and he reports that if he were now making an estimate upon the drawings and specification sent to the Works Committee last year his figures would be increased by £500. He also asks that, as the building is to be erected a few feet back from the line originally proposed, a sum of £400 may be added to cover the cost of fencing in a strip of additional ground which has been acquired and which he suggests might be excavated with a view to the better lighting of the basement. The revised estimate of the cost of the station is therefore £11,400, and it is recommended that the revised estimate be referred to the Works Committee.

Shorland's Stoves.—The Cottage Hospital, Fleetwood, is being warmed and ventilated by means of Shorland's patent Manchester stoves, the same being supplied by Messrs. E. H. Shorland & Brother, of Manchester.

Discovery of Coal in Ireland.—A Manchester Syndicate, which has been sinking for coal near Dungannon, County Tyrone, has come upon an extensive seam, of splendid quality, 190 yards from the surface.

An Improved Sewer Pipe.—An interesting test of an improved sewer pipe joint lately took place on the premises of Messrs. Monsell, Mitchell and Co., Townsend Street, Dublin. This method has been devised by Mr. T. Fitzpatrick, who has disposed of his patent to Messrs. Craig & Co., Kilmarnock. The latter are now manufacturing pipes with the new joints, and have appointed Messrs. Monsell, Mitchell & Co. their sole agents in Dublin. The new joints, by an ingenious arrangement, ensure in the connected pipes that perfect uniformity of bore which is essential for proper drainage.

Spalding.—At the meeting of the Spalding Urban District Council a scheme was adopted for considerably extending and improving the public lighting of the town. It was also decided to erect another gasholder and carry out other improvements at the Spalding Gasworks, at an estimated cost of £3,000.

Morecambe, Lancashire.—Extensive building operations are being carried on at the present time at this popular seaside resort. A fine block of shops and boarding houses have just been completed at the West end, where there is also a large hotel in process of erection. At the east end, a central site in "The Crescent," a new bank for the Lancaster Banking Company is being built from designs by Mr. E. H. Dawson, A.R.I.B.A., of Lancaster. There is also a large market and assembly hall (to be called the Victoria Market and Hall) which is to be ready by the summer season. During the last few years Morecambe has grown very rapidly. On Wednesday afternoon the directors of the proposed West-end (Regent Road) Pier, (the architects for which are Messrs. Magnall & Littlewood, of Manchester), met and opened the tenders for the first section of the work, extending beyond the Pavilion, and this portion was let to the Widnes Foundry Company, of Widnes. The work will be commenced within the ensuing fortnight.

Oban Outfall Works.—The result has been published of the competition invited for the sewerage and sea outfall works at Oban. There were twenty-five designs sent in for selection. The Town Council appointed a professional assessor in Mr. T. Niven, C.E., Glasgow, and under his report the plans judged best in order of merit were—first, "Kerrera"; second, "Gravitation." The author of the first premiated design was found to be Mr. Woulfe Brennan, C.E., of Oban, and of the second Mr. Radford, C.E., of Nottingham.

New Clock and Chimes.—A large new clock and chimes, of Lord Grimthorpe's design, have been erected in the parish church of Halesowen, near Birmingham, and formally started by a former rector of Halesowen (Canon the Hon. F. G. Pelham). It is fitted up with all the latest improvements, and will doubtless be a boon to the inhabitants. The whole of the work has been carried out by John Smith & Son, Midland Clock Works, Derby.

SOCIETY MEETINGS.

Liverpool Architectural Society.—At the meeting of this society, held on Monday evening week, in the Law Library, Union Court, Mr. Henry Hartley presided. He referred to the death of Mr. Charles Aldrich, F.R.I.B.A., saying that he was one of the oldest, most active and most esteemed members of their society. Mr. T. Cook, in moving a vote of condolence with the family of Mr. Aldrich, said that his deceased friend was one who was highly thought of by the whole of the profession. Mr. Matear seconded the vote, which was carried. A paper, by Mr. Percy S. Worthington, of Manchester, entitled, "Churches of the Twelfth and Thirteenth Centuries in Burgundy," was afterwards read.

York Architectural Society.—There was a good attendance at the Church Institute, Lendal, when Mr. John Lane delivered an interesting and instructive lecture, which was entitled "The City of Brussels." Mr. A. Pollard, past president, presided. In his lecture Mr. Lane described the places of interest in Brussels, considered both from the visitors' and the architects' point of view, and particularly mentioned the cathedral and chief churches, and the celebrated Palace of Justice, and the boulevards. He also spoke of the laying out of the existing city, and the improvements that had taken place in the buildings during the present century. The lecturer gave a short account of the history of Belgium, and of the wonderful progress that had been made during the reigns of Leopold I. and Leopold II., the present king. The lecture also included a description of Belgian peasant life, and treated of several places of interest in Belgium.

Edinburgh Architectural Association.—At the meeting of the Edinburgh Architectural Association, Mr. W. W. Robertson presiding, after the transaction of some formal business, Mr. A. Hunter Crawford read a paper on "The Suburban House." We were leaving behind us, said the lecturer, the idea that the portico of a Greek temple might be adapted to the porch of a suburban house, and we even thought now that the perfect propriety and respectability of Newington might be improved upon. A well-designed house was homelike from the outside, convenient in its arrangements and interesting in its features. A good plan greatly depended on the size and arrangement of the hall and staircase, on the pantry and its relation to the dining-room, kitchen and entrance, and on the limited space wasted in passages. The lecturer illustrated by limelight views good and bad types of plans, and then proceeded to contrast stone and brick houses, advocating a freer use of brighter and warmer materials. Characteristic work by Messrs. R. Norman Shaw, R.A., George Sherrin, Ernest George and Peto, C. F. A. Voysey, Ernest Newton, E. J. May and other able architects was shown on the screen.

Glasgow Architectural Association.—The annual meeting was held in the rooms, 114, West Campbell Street, Mr. A. N. Paterson, in the chair. The seventeenth annual report, which was read by Mr. W. R. Watson, secretary, narrated the work of the Association during the past session. Memorials, it stated, had been addressed by the association to the Town Council relative to the proposed removal of the Tron steeple, and to her Majesty's Office of Works with reference to the repairs in progress at the cathedral. The most noteworthy event of the session had been the successful arrangement of a scheme of co-operation with the Glasgow Institute of Architects, for the acquirement of premises to be jointly occupied by the two societies.

SAWDUST.

THE extension of the City Hospital, Netherfield Road North, Everton, for which the Corporation has been authorised to borrow the sum of £26,000, was considered by the Hospitals Committee with a view to the modification and improvement of administrative arrangements in the enlarged institution. The site has been enlarged to the extent of two acres, and the work of rebuilding will be entered upon forthwith.

THE Halifax Town Council has unanimously resolved to purchase the present Infirmary Buildings and the ground upon which they stand, as a site for the proposed new Police Offices. The price agreed upon is £7,000, and this works out at 32s. 3d. per yard. The Council is in favour of the erection of Police Offices and a Court House, the cost not to exceed £8,000, making with the cost of the site £15,000 for the whole scheme.

FROM the 63 designs sent in for the proposed new Sanatorium at Crewe, the first premium has been awarded to Mr. George E. Bolshaw, of Lord Street, Southport, and the second to Mr. S. Harding Payne, of Bedford Row, London. Mr. Bolshaw is to be employed as the architect for the new building, provided that any alteration of his design required by the Health Committee be made without any extra cost. The cost of the Sanatorium will be about £5,000.

PLANS for the erection of a permanent hospital, at an estimated cost of £8,780, have been passed by the Keighley and Bingley Joint Hospital Board. The architect, Mr. F. Moore, has been instructed to push forward the work as quickly as possible.

A SPECIAL meeting of the Mold Urban Council was held on Wednesday last, for the purpose of meeting Mr. D. H. Radford, the engineer of the proposed sewerage works for the town and district. It was decided that the whole of the schemes as presented by Mr. Radford be adopted, and that the works be proceeded with at once. The estimated cost of the work is between £7,000 and £8,000.

THE Swansea and Aberavon section of the Rhondda and Swansea Bay Railway, giving a through passenger service from Freherbert to Swansea was opened on Thursday last. The line cost nearly a million to construct, and has taken fourteen years to complete.

THE scheme for supplying the high level districts of the Wakefield Rural Council's area with water, affecting portions of Stanley, Crigglestone, Ardsley, and Shitlington, has been referred to a committee for further investigation and report. The total expenditure on the proposed new reservoir at Ardsley and other necessary works is estimated at about £20,000.

THE studios are full of preparation for the approaching Art season. "Show Sunday" for outsiders is on the last day of the month; several members of the Royal Academy have already sent out their invitations for the following Sunday, April 7 (Palm Sunday), and, in many cases, for the previous day also.

ON Thursday, the 14th, a vestry meeting was held in Wakefield Cathedral to consider what action should be taken with reference to the offer recently made by Col. Clapham, of Manchester, to provide a new reredos, &c., for the Cathedral. Archdeacon Donne, the Vicar, presided, and it was resolved that Messrs. Stewart, Sons & Chalker should at once apply for a faculty to remove the present reredos from the Cathedral and to erect a new reredos and a rear table.

It has been decided to build a new parish Church at Wombwell, and a public meeting in connection with the scheme is to be held. The present structure is a very old building, and is in a bad state of repair.

A SUBSCRIPTION has been started in France for the purpose of restoring the ancient Palace of the Popes at Avignon. The historical building, which has greatly deteriorated, will be transformed into a museum of the King René period and of the transference of the Papacy to Avignon. A special barracks will be built for the garrison, whose quarters are now in the palace.

LOVERS of metal work, arms, and armour will be interested in the sale at Christie's, which commenced yesterday and continues for four days, of the celebrated collection of Mr. Edwin J. Brett. It will be the most important sale of examples of the armourer's art since the dispersal of the great Meyrick collection.

THE Leicester Town Council have unanimously adopted plans for a new technical and art school which is to be built on a site of their own at a cost of £35,000. At present the technical and art schools are in different parts of the town, and are full to overflowing. But by the new arrangement the entire technical and art teaching passes under the control of the Corporation, and under its own roof.

MR. FREDERICK WHEELER, F.R.I.B.A., of 22, Chancery Lane, W.C., and 4, Carfax, Horsham, is the architect for the board school to be erected at Horsham. Mr. Peter Peters, of Horsham, is the builder.

It is proposed to restrict the expenditure on the joint isolation hospital, Ware, to within £5,000, including fixtures and provision for small-pox cases.

THE Stamford Board of Guardians has decided to expend £5,000 in alterations and additions to the workhouse.

APPLICATION is to be made by the Town Council of Salford for powers to borrow £100,000 (including the sum of £13,268 already applied for) to provide for contemplated extensions of the gasworks.

THE convalescent home has just been commenced at Littlehampton. Messrs. Holland and Hannen, of High Street, Bloomsbury, W.C., are the builders, and Mr. Frederick Wheeler, F.R.I.B.A., of 22, Chancery Lane, London, W.C., and 4, Carfax, Horsham, is the architect. The whole building will be lighted by electricity, and fitted with every modern convenience. It is expected that the building will take a year to complete.

THE sum of £1,798 is to be expended by the Town Council on alterations and additions to the Portsmouth public baths.

THE adoption of the eight-hours' system at the Woolwich Arsenal continues to give the most satisfactory results. The amount of work done is quite equal to that accomplished under the old plan when the hours were longer. There are at present altogether about 16,000 men and boys employed in the Arsenal.

MRS. HESKETH, lady of the manor of North Meols, has promised £2,000 for a new church for the ancient parish of St. Cuthbert's, Churchtown, Southport, and another generous helper has promised £500. The new edifice will take the place of the old building, which is the mother church of Southport.

It is proposed by the Manchester City Council to construct underground conveniences in St. Peter's Square, and at the corner of Corporation Street and Hanging Ditch. Application for sanction to borrow £1,500 for the purchase of property and the laying it out as a pleasure ground is also to be made.

THE plans of Messrs. Jenkins & Marr, of Bridge Street, Aberdeen, have been adopted for the new fever hospital to be built at Inverurie.

THE French workmen employed in the construction of a fort at Pont St. Vincent, near Nancy, on Saturday night attacked the contractor of the works, pelting him with stones and uttering loud cries of "Death, Death!" The gendarmes succeeded in keeping back the mob, and escorted the contractor to the municipal offices, where he took refuge. Reinforcements were sent for and on their arrival order was restored. The outbreak was due to jealousy of the Italian workmen, a number of whom had been engaged for the works in question.

THE Baths Committee of the Derby Town Council has had before it the plans and estimates prepared by the surveyor for building new baths on the almshouse site in Full Street. The surveyor's estimate for the new buildings is £15,000, exclusive of furnishing. The committee recommend the Council to grant the sum of £15,000 for building the baths. It is also proposed by the Town Council to make alterations and additions to the electric light installation at a cost of £5,000.

THE £6,400 required for the erection of the casual wards, etc., at the Sunderland workhouse has been sanctioned, and it is proposed to proceed with the work at once.

PREMIUMS of £100 and £50 are offered by the Ipswich Board of Guardians for the two best plans submitted for the rebuilding of the workhouse.

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

CURRENT PRICES.

TIMBER.			
K H B	4 x 11 1st & 2nd Yellow...	per Std.	£18 0 0
DOM	4 x 11 3rd	"	15 15 0
P B W	4 x 11 5th	"	9 15 0
S K B	4 x 9 1st & 2nd	"	15 15 0
P T W	4 x 9 3rd	"	15 10 0
↑ ↑ ↑	4 x 9 5th	"	10 0 0
M G & Co.	3 x 11 1st (Gromme) Yellow	"	15 0 0
N S A	3 x 11 2nd	"	14 10 0
D x M	3 x 11 5th	"	8 10 0
	3 x 9 1st Omega	"	16 10 0
B S 1st S C	3 x 9 1st	"	15 0 0
D D D	3 x 9 3rd	"	13 10 0
H A B	3 x 9 3rd	"	13 0 0
D M	3 x 9 4th	"	10 5 0
R S S	3 x 9 3rd	"	9 15 0
M F D	3 x 9 5th	"	9 0 0
***	3 x 9	"	7 10 0
W S N	3 x 9	"	5 0 0
S K B	3 x 8 1st	"	12 5 0
B A T	3 x 8 1st & 2nd Omega	"	8 5 0
S K A	3 x 7 3rd	"	10 0 0
O B B O L A	3 x 7	"	8 10 0
G & W	2 x 9 1st	"	11 10 0
H H H	2 x 9 4th	"	10 0 0
	2 x 8 u/s Yellow	"	8 0 0
	2 x 7	"	8 5 0
	2 x 6	"	7 10 0
	2 x 5	"	6 15 0
	2 x 4	"	7 10 0
	2 x 3	"	8 10 0
F R 1	3 x 11 1st White	"	10 10 0
* P *	3 x 11 2nd	"	8 0 0
E F 1	3 x 9 1st	"	9 5 0
J A S	3 x 9 2nd	"	7 15 0
	3 x 9 1st Spruce	"	10 0 0
	3 x 9 2nd	"	7 10 0
	3 x 9 3rd	"	6 15 0
	3 x 11 1st Pine	"	26 0 0
	3 x 11 2nd	"	17 10 0
	3 x 11 3rd	"	10 10 0
H & H	1 1/2 x 7 1st Yellow	per Sq.	0 14 0
D D D	1 1/2 x 7 3rd	"	0 13 0
S B S	1 x 7 1st	"	0 11 0
S A B	1 x 7 2nd	"	0 9 6
S-TERTIA	1 x 5 3rd	"	0 7 0
J P J	1/2 x 6 mixed Yellow	"	0 8 0
Oregon Pine	...	per Std.	£12 to £15
Pitch Pine	...	"	£11 to £12 10s.
"	fresh sawn	per load	42s. to 52s.
Mahogany, Honduras (logs)	...	per ft. sup.	3 1/2d. to 6 1/2d.
"	(large & prime)	"	9d. to 2s.
"	Tabasco	"	3d. to 5 1/2d.
"	Panama	"	3d. to 5d.
"	African	"	2 1/2d. to 7d.
"	(large & prime)	"	8d. to 2s.
"	Cuba	"	3 1/2d. to 9d.
Cedar, Cuba	...	"	3d. to 5d.
"	Mexican	"	3d. to 3 1/2d.
Sequoia (clear)	...	per ft. cube	1s. 10d. to 2s. 3d.
Birch Planks	...	"	1s. to 1s. 3d.

METALS.

Iron—Cleveland Pig	...	per ton	34s. 1d. to 34s. 3d.
"	Hematite	...	41s. 4 1/2d. to 41s. 7d.
"	Scotch Bar	...	per ton £5 5s.
"	Best	...	£5 12s. 6d.
"	Extra Best	...	£6 7s. 6d.
Yellow Metal Sheets	...	per lb.	4 1/2d. to 4 3/4d.
Copper—British, Best Selected	...	per ton	£42 to £42 10s.
"	Sheets, Strong	...	per ton £49
"	Australian Fine	...	£42 10s. to £43
Lead—Pig	...	...	£9 11s. 3d. to £9 12s. 6d.
"	Sheet, English	...	£10 12s. 6d. to £10 15s.
Tin—English Ingots	...	per ton	£63 to £63 10s.
"	Australian	...	per ton £60 2s. 6d. to £60 12s. 6d.
"	Straits	...	£59 17s. 6d. to £60 7s. 6d.
"	Banca	...	£60 10s. to £60 15s.
Zinc—Sheet	...	per ton	£18 5s.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ABERDARE.—For the erection of school-buildings, &c., Navigation, for the Llanowm School Board. Mr. A. O. Evans, architect, Post Office Chambers, Pontypridd:—

Williams, Watkin	...	£4,649 0 0
Jenkins and Son	...	4,600 0 0
Rees, John	...	4,534 0 0
Jones, D., and Co.	...	4,492 0 0
Williams and James	...	4,409 0 0
Howell, A. J., and Co.	...	4,275 0 0
Jenkins, D.	...	4,190 0 0
Davies, David	...	4,045 0 0
Lissaman	...	3,988 0 0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS

2½ or 3 inch PRESSED BRICKS
Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway
Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO

TILES MOSAIC FAIENCE

Poole Dorset

ABINGDON.—For erection of building in Abingdon, Berks,
intended to be used as a library and reading room, for the
Master and Governors of Christ's Hospital, Abingdon. Mr.
J. G. T. West, architect, Abingdon.

Bartlett Bros., Witney	£2,435	0	0
Orchard, S., and Son, Banbury	2,289	0	0
Goodchild, W., Reading	2,185	0	0
Wernham, G., Reading	2,100	0	0
Robinson, C. C., Wolvercote	2,083	0	0
Martin, T., Maidenhead	2,050	0	0
Buckle, J., Abingdon	2,035	0	0
Grant, J., Banbury (accepted)	1,849	0	0
Wheeler, G. H., Abingdon	1,700	0	0

ASHFORD.—For the erection of a proposed new board
school and master's residence, with boundary walls and
offices, at Ashford, Kent, for the Ashford School Board.
Mr. Henry J. Jeffery, M.S.A., architect and surveyor, Ash-
ford, Kent:—

Wade, G., Chelsea	£6,379	0	0
Peters and Son, Horsham	6,277	0	0
Fearon, T. L., Folkestone	6,205	0	0
Jones, D. C., and Co., Gloucester	6,196	0	0
Haisell, W. J., Lydd	5,905	6	0
Wallis and Sons, Maidstone	5,883	0	0
Steady and Co., Ashford	5,740	0	0
Denne, W. and T., Walmer	5,684	0	0
Bourne, W., and Son, Woodchurch	5,600	0	0
Giles and Giles, Ashford	5,585	0	0
Avard, R., Maidstone	5,476	0	0
Barden, T. J., Maidstone	5,445	0	0
Nunn, A. E., Tenterden	5,439	6	2
Girling and Coe, Ipswich	5,390	0	0
Davis and Leane, Goudhurst	5,352	0	0
Denne, G. H., and Son, Deal	5,342	0	0
Hayward and Paramor, Folkestone	5,239	0	0
Ingleton, A. S., Herne Bay	5,235	0	0
Baker, W., Ashford	5,180	0	0
Seager, L., Sittingbourne	5,175	0	0
Hall, J. J., Dover	5,102	1	0
Whiting, R. M., and H., Ospringe	5,058	0	0
Amos and Foad, Whitstable	4,965	0	0
Horscroft and Mills, Maidstone	4,944	0	0

* Accepted, subject to the approval of the Education
Department.

CARDIFF.—For extension of the Moorland road Board
School, Spotlands, Cardiff, for the Cardiff School Board:—

Howell, A. J., and Co.	£8,940	0	0
Allan, J.	8,698	0	0
Knox and Wells	8,431	0	0
Lathey and Co.	8,325	0	0
Gibson, H.	8,200	0	0
Davies, D.	7,990	0	0
Richards, E. F., Barry	7,875	0	0
Davies, H.	7,762	0	0
Dunn, C. C. (accepted)	7,600	0	0

Rest of Cardiff.

CORFE CASTLE, DORSET.—For the erection of school build-
ings for the Committee of the "Bankes" Testimonial. Mr.
Walter J. Fletcher, architect, Wimborne. Quantities by the
tenders:—

Green, A. H.	£1,995	0	0
Merrick, F., and Sons	1,795	0	0
Bent and Vick	1,750	0	0
Jenkins and Sons	1,698	0	0
Linington, G.	1,685	0	0
Chinchen, W. J.	1,550	0	0
Pond, G.	1,500	0	0

No tender accepted, but fresh tenders asked for from the last
three, some alterations in stone, &c., being made.

Linington, G. (too late)	£1,585	0	0
Pond, G.	1,495	0	0
Chinchen, W. J., Bournemouth*	1,400	0	0

* Accepted.

COWBRIDGE.—For restoration of Cowbridge Town Hall.
Mr. C. B. Fowler, architect, Cardiff:—

Hatherly and Carr, Bristol	£865	0	0
Evans, T., Cardiff	798	0	0
Cox and Bardo, Cardiff	758	0	0
Shepton, J. S., Penarth	751	0	0
James, A. G. Cowbridge (accepted)	737	17	0

DARTMOUTH.—For the execution of drainage works for the
Corporation of Dartmouth. Mr. T. O. Veale, Borough
Surveyor, Dartmouth. Quantities by Surveyor:—

Sanders, W. H., and Son	£1,812	0	0
Shaddock, W. C.	1,793	0	0
Shaddock, L.	1,620	0	0
Shaddock, T.	1,542	10	0
Whitham, J. T.	1,537	0	0
Pillar, R. C.*	1,510	0	0
Ambrose and Welsh*	1,474	0	0
Pike, E.*	1,440	0	0
Bridgman, Marcus*	1,267	10	0
Brenton, W.*	1,249	0	0

* These firms have been asked to tender for 15-in. pipes
instead of 18-in., as first intended to be used. 15-in. pipes
were approved by Mr. S. J. Smith, Local Government Board
Inspector, at the inquiry.

EASTVILLE.—For alterations and additions to Queen's
Head, Eastville. Mr. J. Beavan, architect:—

Perkins	£1,845	0	0
Davis	1,834	0	0
Wilkins and Sons	1,749	0	0
Perrott, J.	1,733	0	0
Stephens, Bastow and Co., Limited	1,679	0	0
Wilkins, G. H.	1,642	0	0
Walters	1,600	0	0
Browning	1,596	5	0
Hatherly and Carr (accepted)	1,595	0	0

All of Bristol.

ENFIELD.—For building residence, Wellington-road, Bush
Hill Park, Enfield, for M. Butfield, Esq. T. Potter, Esq.,
Sevenoaks, architect:—

Morrison	£1,256	0	0
Goff	1,224	0	0
Cordell	1,196	0	0
Patman	1,195	0	0
Fairhead	1,181	0	0
Brown	1,178	0	0
White	1,153	0	0
Hart, Percival, 303, West Green-road N. (accepted)	1,120	0	0

HORWICH, LANC.—For the erection of a residence, Victo-
ria road, for Mr. J. H. Jackson, M.B. Mr. Ernest W.
Dyson, Horwich, Architect. Quantities by the architect:—

Excavator, mason, and bricklayer's work:			
Hall, E., Horwich	£454	16	0
Carpenter and joiner's work:—			
Murray, A., Horwich	230	0	0
Slaters work:—			
Coulthurst, R., Horwich	34	5	0
Plasterer's work:—			
Howarth, J., Horwich	61	10	0
Plumber and glazier's work:—			
Offord, T., Horwich	72	10	0
Painter's work and fittings (not yet let):—			
Assumed	55	0	0
Total	£908	1	0

KENLEY.—For the erection of a new police-station at
Kenley, for the Receiver for the Metropolitan Police district.
Mr. John Butler, F.R.I.B.A., architect. Quantities by Mr.
W. M. Thurgood:—

Graham	£4,200	0	0
Grover	4,097	0	0
Higgs and Hill	3,984	0	0
Lathey	3,950	0	0
Smith	3,950	0	0
Holloway Bros.	3,885	0	0
Bullock	3,870	0	0
Lascelles	3,859	0	0
Hart	3,857	0	0
Richardson	3,789	0	0
Page	3,690	0	0

LONDON.—For pulling down and rebuilding No. 110, High
street, Poplar, E. Messrs. C. Foulsham and Herbert Riches,
joint architects, Bromley, E., and 3, Crooked lane, King
William street, E.C.

Robey, J. T.	£897	0	0
Coleman, J. K.	860	0	0
Osborn, T., and Sons	850	0	0
Sheffield Bros.	845	0	0
White and Son	780	0	0
Salt, S. (accepted)	777	0	0

INTERNATIONAL BUILDING TRADES EXHIBITION,

THE SECOND OF A SERIES UNDER NEW MANAGEMENT,
WILL BE HELD AT THE

ROYAL AGRICULTURAL HALL, LONDON,

FROM MARCH 25 TO APRIL 4.

The Consultative Council, consisting of gentlemen of high repute in the Professional and Manufacturing World, are taking special interest in this Exhibition, for the purpose of securing the greater development of Trade in connection with the Building Industries.

CONSULTATIVE COUNCIL.

BANISTER FLETCHER, J.P., D.L., F.R.I.B.A., *Chairman.*

J. PARNELL ALLEN, P.A.S.I., Newcastle-on-Tyne.
CHAS. BARRY, F.S.A., F.R.I.B.A.
ERNEST BENEDICT, C.E., (*The Indian Engineer*).
T. BLASHILL, F.R.I.B.A., Architect to the London County Council.
T. CHATFIELD CLARKE, F.R.I.B.A.,
F. R. FARROW, F.R.I.B.A.
LEWIS H. ISAACS, F.R.I.B.A.
CHAS. LYNAM, F.R.I.B.A.
J. DOUGLASS MATHEWS, F.R.I.B.A., F.S.I.
EDMUND A. PONTIFEX, M.Inst.C.E., Master of the Armourers' and Braziers' Company.
JOHN E. SEARS, F.R.I.B.A.

E. J. KIBBLEWHITE, A.S.A. (*Editor of THE BUILDING NEWS*).
GILBERT WOOD, F.R.G.S. (*The Architect*).
JOHN MOLEM BURT (John Molem & Co.), Master of the Loriners' Company.
H. H. BARTLETT (Perry & Co.), Past President Institute of Builders.
T. FREEMAN, F.G.S., F.S.S., Warden Shipwrights' Company.
LAZENBY LIBERTY (Liberty & Co.), Master of Glass Sellers' Company.
THOS. MINTON, J.P. (Mintons, Limited).
H. GREVILLE MONTGOMERY (*The British Clay-worker and Potter*).

PEARSE MORRISON, Master of Blacksmiths' Company.
W. NISBET BLAIR, C.E., Borough Engineer and Surveyor, St. Pancras.
LEWIS ANGELL, C.E., Borough Engineer and Surveyor, West Ham.
ALFRED DARBYSHIRE, F.S.A., F.R.I.B.A., Manchester.
F. BENNETT SMITH, F.R.I.B.A., Manchester.
FREDK. T. PILKINGTON.
LATHAM A. WITHALL, F.R.I.B.A., F.S.I.
T. LOCKE WORTHINGTON, A.R.I.B.A., Assoc. San. Inst.

T. FREEMAN, Hon. Sec.

Full Particulars on Application to THE MANAGER, 222, STRAND, LONDON. W.C.

Telegrams—"BATIMENT, LONDON."

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W

LONDON, S.E.—For enlarging by fifty-nine places and making alteration to the school in Webber row, Southwark, which provides accommodation for 611 children, was erected in the year 1877, and was enlarged in 1882, for the London School Board—

Downs, W. ...	£12,547	£140
Patrick, J. and M. ...	12,188	159
Kilby and Gayford ...	12,098	168
Foster and Dicksee ...	11,999	120
Longley, J. and Co. ...	11,910	163
Lawrence, E., and Sons ...	11,741	179
Nightingale, B. E. ...	11,631	190
Miskin, C. ...	11,588	198
Charteris, D., Page street, Westminster (accepted) ...	11,361	154

A. Amount included for building brickwork in cement.
(a) Cost of school buildings and manual training centre, £7,800; (b) tar-pavement, playgrounds, and drainage, £771; (c) boundary-walls and gates, £250; (d) two rooms for teachers, £200; (e) schoolkeeper's house and cookery centre, £1,161; (f) works to existing buildings, £880; (g) extra depth of foundations, £145; (h) building the whole of the brickwork in cement, £154; total, £11,361. Cost of existing school, £7,728; estimated cost of proposed enlargement, £11,361; total, 19,089. Total accommodation of school, including proposed enlargement, 870; total cost per head of ditto, £21 18s. 9d.

LONDON.—For alterations to No. 2A, Grand Parade, Finchley-road, for Lloyd's Bank. Mr. Horace Field, architect:—

Davenall, H. G., Southampton Works, Gospel Oak (accepted) ...	£595	0	0
LONDON.—For rebuilding No. 10, Hop-gardens, St. Martin's-lane, as per plans and specifications prepared by Mr. M. Bruton, 171, Queen Victoria-street. Quantities by Mr. Hawker:—			
Pritchard and Renwick ...	£1,087	0	0
Whitehead ...	990	0	0
Hooper ...	980	0	0
Rowe ...	975	0	0
Holloway ...	973	0	0
Courtney and Fairbairn ...	945	0	0

LONDON.—For the erection of a new police-station at Clark's-buildings, W.C., for the Receiver of the Metropolitan Police District. Mr. John Butler, F.R.I.B.A., architect. Quantities by Mr. W. H. Thurgood:—

Lathey ...	£7,679	0	0
Newman ...	7,560	0	0
Smith ...	7,437	0	0
Hart ...	7,400	0	0
Perry ...	7,394	0	0
Richardson ...	7,387	0	0
Higgs and Hill ...	7,384	0	0
Holloway Bros... ..	7,377	0	0
Willmott... ..	7,249	10	0
Grover ...	7,191	0	0
Scrivener ...	6,977	0	0
Lawrence and Son ...	6,949	0	0

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.
SLATE MERCHANT,
SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

**Penrhyn-Bangor,
Oakeley-Palmerston,**

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

LEIGHTON.—For alterations and additions to Infants School, Beaudesert, for the Leighton School Board. Mr. J. T. Lawrence, architect, Leighton Buzzard. Quantities by architect:—

Tutt, Bros. ...	£942	0	0
Adams, F. ...	909	0	0
Garside, G., and Son ...	900	0	0
Cook, D., and Son ...	878	0	0
Hart and Atkins ...	847	10	0
Edwards Bros. ...	788	0	0

PORTSMOUTH.—Additions to offices, &c., for the Portsea Island Gas Light Co. Messrs. Rake and Cogswell, architects, Portsmouth:—

Croad, J. ...	£1,130	0	0
Light and Son ...	1,117	0	0
Ward, W. ...	1,099	0	0
Corke, H. ...	1,075	0	0
Jones, H. (late) ...	1,050	0	0
Evans, W. (accepted) ...	1,050	0	0

POOLE, DORSET.—For the erection of corn-store, stable and coach-house for Mr. Warn, High street. Mr. Ed. Van Schepdael, architect:—

Tilsed, E. R., Poole ...	£415	18	6
Rigler, T. C., Poole ...	325	0	0
Saunders, A. D., Poole ...	290	0	0
Gray, W. H., Poole (accepted) ...	285	0	0
(Architect's estimate, £306 7s.)			

SOUTHAMPTON.—For the construction of a pile foundation, &c., for the Mount Pleasant Board School, Bevois Valley. Mr. John H. Blizard, architect, Lansdowne House, Castle lane, Southampton. Quantities by architect:—

Stevens and Co. ...	£7,900	0	0
Daysh ...	6,980	0	0
Payne, A. ...	6,972	0	0
Playfair and Toole ...	6,847	0	0
Honeychurch and Co. ...	6,855	8	0
Crook and Batten ...	6,697	0	0
Roe and Grace ...	6,660	0	0
Osman, F. ...	6,584	0	0
Bull, W. H. ...	6,484	0	0
Dyer and Sons, Bevois Hill, Southampton (provisionally accepted) ...	6,400	0	0
(Architect's protecting estimate, £6,896.)			

YEovil.—For building the Cole Memorial Church Yeovil, Somerset. Mr. J. Nicholson Johnson, A.R.I.B.A., architect, 21, Princes-street Yeovil:—

Andrews, Thornford ...	£9,650	0	0
Stephens, Bastow and Co., Limited, Bristol... ..	8,998	0	0
Haywards and Waster, Bath... ..	8,899	0	0
Symonds, Cardiff ...	8,500	0	0
Cowlin and Sons, Bristol ...	8,173	0	0
Bird and Vippard, Yeovil ...	7,873	0	0
Pollard, Bridgwater ...	7,499	9	0



BLACKMAN VENTILATING COMPANY, LTD.,

Engineers and Specialists in
VENTILATING AND WARMING
 Public and Industrial Buildings, Schools, &c.
 20,000 INSTALLATIONS OF MECHANICAL VENTILATION IN SUCCESSFUL USE.
 63, FORE STREET, LONDON, E.C., AND BRANCHES.

DESIGNS, Drawings, Competitions, Perspectives, Tracings, Photoprints, Typewriting, Mounting, etc. Quantities, Estimates, Specifications. Finsbury Drawing Office, 113, Pavement, Moorgate, London, E.C. Established 1887.

Publishing in Parts as Ready.

THE QUANTITY SURVEYOR.

A full exposition in quarto of the most approved modern method, by CHAS. HENRY SEARLE.

Part 6 is now ready. Single Parts, price 1/8 each, forwarded post free by the Author, 16, SOUTHWARK STREET, LONDON, S.E.

APPOINTMENTS WANTED.

ARCHITECT'S ASSISTANT (25) desires RE-ENGAGEMENT. Excellent provincial experience, good draughtsman, working drawings, details, specifications. First-class building construction testimonials. Salary, 35s. SIMMONS, Chesterfield Road, Belper.

ARCHITECTURAL DRAUGHTSMAN desires ENGAGEMENT. Tracer, colourist, details, working drawings. Perspective, tracings, &c., executed in evenings at moderate terms.—Address, G. WELCHMAN, 19, Carlton Road, Putney.

ARCHITECT AND SURVEYOR'S ASSISTANT (22) desires RE-ENGAGEMENT in London office. Good draughtsman, tracer, &c. Seven years' experience in the country. Excellent reference. Salary moderate.—H. G., 24, Brighton Road, Horsham, Sussex.

ARCHITECT'S ASSISTANT (23) desires ENGAGEMENT. Town or country. Well up in competition work, contract and detail drawings, perspectives, specifications, &c. References.—Address, ARCHITECT, 98, Blenheim Crescent, London.

BUILDER'S CLERK seeks RE-ENGAGEMENT. Well up in general office work, and methodical.—W. S., 8, Pountney Road, Lavender Hill, S.W.

GENERAL FOREMAN. Just finished large job. Twenty years' experience. Energetic. Good manager of men. Careful with extras. First-class testimonials from late employers. Carpenter.—P. R., 24, Lena Gardens, Hammersmith, W.

ARCHITECT'S EXPERIENCED LEADING ASSISTANT (27) desires ENGAGEMENT in first-class office. Permanency. Country preferred. Specimens submitted. Excellent references.—S. D., 8, Manor Place, Paddington Green, W.

VAUXHALL.—For erection of factory shed in rear of 85, 87, and 89, Vauxhall-walk, and warehouse No. 97, Vauxhall-walk, as per plans and specifications prepared by Mr. J. A. J. Woodward, 69, Kennington Oval. Quantities by Mr. W. H. Woodward :—

	A.	B.	C.
Maides and Harper ...	£1,508	£2,436	£3,944
Parsons ...	1,397	2,244	3,641
Nightingale ...	1,434	2,106	3,540
Ling ...	1,358	2,162	3,520
Whitehead ...	1,380	2,130	3,510
Hooper, J. ...	1,335	2,114	3,449
Marsland, J. ...	1,292	1,995	3,287
A.—Factory. B.—Warehouse. C.—Total.			

YOUNG—For building Chapel and Sunday School Youlgrave (near Bakewell), for the Primitive Methodists. Mr. Henry Harper, architect, Market-place, Nottingham :—
 Vains, J. ... £1,308 19 5
 Knowles and Son ... 1,297 0 0
 Wildgoose, L. T. ... 1,248 0 0
 Tofts, W. and G. ... 1,090 0 0
 Skimwell, Evans and Co. ... 1,035 0 0
 Note.—Foundations, boundary walls, &c., not included. The stone for walling, &c., is all given.

WANSTEAD, E.—For the erections of additions to Downsell-road schools, for the Wanstead School Board. Mr. Bressey, architect :—

	Tenders for Works.	Extra for Heating.
Jones, D. C. and Co., Gloucester ...	£5,743 0 0	40 0 0
Hearle and Farrow, St. George's ...	5,579 0 0	49 10 0
Potter, J., Horsham ...	5,380 0 0	31 10 0
Reed, A. and Son, Stratford ...	5,375 0 0	37 0 0
White, T. and Son, Bow ...	5,350 0 0	36 18 0
Cousell Bros., Bethnal Green ...	5,319 0 0	37 0 0
Catley, J., Leytonstone ...	5,249 0 0	37 0 0
Rons, H. R., Grays ...	4,878 0 0	33 10 0
(Architect's estimate, £5,035 12s. 6d.)		

WELLS.—For the erection of Cottage Hospital, Wells. Mr. W. J. Wilcox, Architect :—

	Tenders for Works.	Extra for Heating.
Bird ...	2,050 0 0	40 0 0
Forse ...	1,998 0 0	49 10 0
Bray ...	1,998 0 0	31 10 0
Long and Sons ...	1,873 0 0	37 10 0
Cock and Ford ...	1,800 0 0	32 10 0
Francis ...	1,800 0 0	—
Love ...	1,799 0 0	39 0 0
Hayward and Wooster ...	1,797 0 0	37 0 0
Lovell and Sons ...	1,796 15 0	36 18 0
Hatherley and Carr ...	1,785 0 0	37 0 0
Huish ...	1,782 16 9	29 12 3
Cook ...	1,700 0 0	28 10 0
Merrick ...	1,698 0 0	57 0 0
Stead ...	1,687 0 0	37 0 0
Wibley ...	1,684 12 0	43 10 0

FURNISH BY GRADUAL PAYMENTS

ON

NORMAN & STACEY'S

LIFE ASSURANCE SYSTEM.

This System enables customers to obtain, by small Monthly Payments, the immediate enjoyment of a well-appointed and artistic home of their own at less cost than renting furnished houses or apartments. By special arrangement with one of the best Life Assurance Companies, the Furniture, in the event of the Customer's death, at once becomes the property of the surviving family without any further payment whatever.

Recognising the demand for a larger and more varied selection than can well be shown at one establishment, Messrs. NORMAN & STACEY now Supplement their own Stock by giving their Customers the additional advantage of selecting their goods from some of the Best Wholesale Houses in each branch of the trade. Every Household Requisite supplied. Goods delivered free in private vans. Terms made to suit the convenience of the Customer.

NORMAN & STACEY, Ld.,

118, QUEEN VICTORIA STREET, E.C.

SELSFIELD QUARRY.

Blocks of this very durable SANDSTONE put on rail at 1s. per foot Cube. Architects should visit this quarry, only 35 miles from London.

ADDRESS:

R. GUNTER, Old House, near East Grinstead.
 Nearest Station, Kingscote, L.B. & S.C.R.

The "UNIVERSAL" SCHOOL BOARD HAT AND COAT HOOK.

We are supplying the above with our

Warranted Steel Wire

Patent Number Clips,

School Board Hat and

Coat Hooks.

which are made of best Malleable Iron, and the Figures of Solid Brass, which are securely fastened by a patent method, thus overcoming the difficulty of painted figures, which soon become discoloured and indistinguishable; and the price will compare favourably with any similar article on the market.

With Patent Number Clips and Brass Figures, from 1 to 999 inclusive. 5s. per doz.

We supply Painted Figures if required in place of Brass, at 3s. 6d. per dozen. Or Plain Clip only at 2s. 6d. per doz.

Patentees and Makers :—

ALFRED BROWN & CO.,
 CITY LOCK AND BRASSPOUNDRY WAREHOUSE,
 81, Smallbrook Street, BIRMINGHAM.

WOOD-BLOCK PAVING.

(MR. WHITE'S SYSTEM).

For Churches, Schools, Offices, &c.

Estimates and full particulars on application to

THOS. GREGORY & Co.

WOOD PAVING AND STEAM JOINTING WORKS,
 Clapham Junction, S.W.



G. BRADY,
 MANUFACTURER OF
Revolving Shutters,
 Sun Blinds, Window Guards, Hoists, Lifts, &c.

IMPROVED SWIVEL PARTITIONS

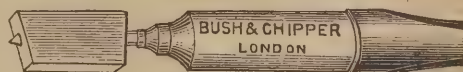
(Brady & Peace's Patent),

In Wood or Iron, for dividing Schools, Warehouses, &c.

WORKS—

BROWNSFIELD MILLS, Ancoats,
 MANCHESTER.

GLAZIERS' DIAMONDS.



ILLUSTRATED PRICE LIST ON APPLICATION.

BUSH & CHIPPER,
 11, President St., Goswell Rd., E.C.

ESTABLISHED 18 YEARS.

PILKINGTON'S

WORKS:

TILES.

CLIFTON JUNCTION,
 NEAR MANCHESTER.

MANUFACTURERS OF HIGH CLASS TILES
 For Floors, Walls, Hearths, Grates and Furniture.

EVERY VARIETY OF TILE WORK FOR

CHURCHES, PUBLIC BUILDINGS AND

PRIVATE RESIDENCES.

London Show Rooms:

LYRIC CHAMBERS, 45, WHITCOMBE STREET, W.C.

Manchester Show Rooms:

29, PRINCESS STREET, ALBERT SQUARE.



MODERN FIRE PLACES AT MODERN PRICES

LOCKS AND FASTENINGS UP TO DATE.

SANITATION AS IT SHOULD BE.

B. WINSTONE, CATALOGUE FREE,
 Cross St., Finsbury, LONDON.

BRAMLEY FALL AND ROBIN HOOD STONE

In large quantities and any sizes supplied immediately, either dressed ready for fixing or in the rough.

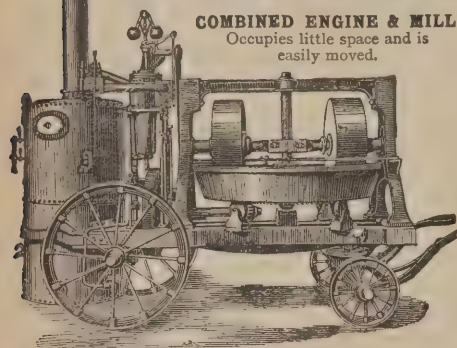
APPLY

B. WHITAKER & SONS, Ltd.,
HORSFORTH, LEEDS.

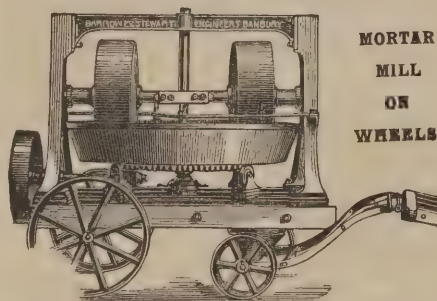
Telegraphic Address: "QUARRIES," LEEDS.

Telephone 2821.

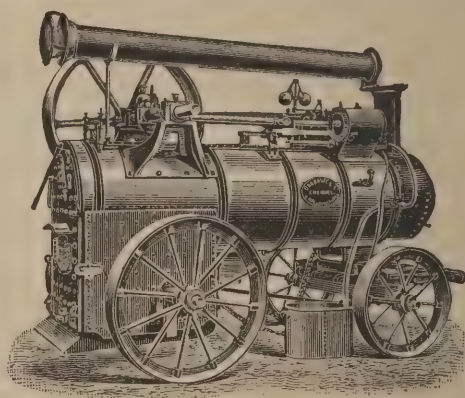
BARROWS & CO., LTD., BANBURY.



COMBINED ENGINE & MILL
Occupies little space and is easily moved.



MORTAR
MILL
ON
WHEELS.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

APPOINTMENTS VACANT.

BRICKWORKS ASSISTANT WANTED
for India. Must be young, of good education, and have a general knowledge of all departments in brick, tile, pipe and pottery work, including machinery. Salary, Rs. 250, Rs. 300 and Rs. 350 per mensem, on three years' agreement. —Address, in writing, with full particulars and testimonials, to B. W. A., care of J. Vickers, Nicholas lane, London, E.C.

BOROUGH OF STRATFORD-UPON-AVON.

BOROUGH SURVEYOR.
The Town Council intend to ELECT a SURVEYOR, at an annual salary of £200 (exclusive of out-of-pocket expenses).

Applications, stating age and past experience, with not more than three recent testimonials, to be sent to me, not later than 27th MARCH instant, endorsed "Borough Surveyorship."

Canvassing will disqualify.

Definition of duties and further information may be obtained from

ROBERT LUNN,

Town Clerk.

Stratford-upon-Avon,
March 12th, 1895.

SWANAGE URBAN DISTRICT COUNCIL.

The Council are prepared to receive APPLICATIONS for the POST of SURVEYOR and INSPECTOR OF NUISANCES combined, at the salary of £100 for the first year, with the prospects of a subsequent increase.

Preference will be given to the holder of a recognised Sanitary Certificate of competency.

The names of three references must be forwarded with each application, but no testimonials.

Applications must be sent to the Clerk of the District Council at the Town Hall, Swanage, so as to reach him before NOON, the 1st day of APRIL, 1895.

THOMAS RANDELL,

Clerk.

Town Hall, Swanage,
March 6th, 1895.

THE LEIGHTON BUZZARD URBAN DISTRICT COUNCIL require a CLERK of WORKS for the Completion of the Water and Sewerage Works. Special qualification required for building.

Salary £3 10s. per week.

Particulars can be obtained from the Engineer, Mr. H. BERTRAM NICHOLS, C.E., of 59, Corporation street, Birmingham.

Applications, with three recent testimonials, to be sent to me on or before TUESDAY, the 26th inst.

By Order of the Urban District Council,

JOHN NEWTON,

Clerk.

Leighton Buzzard,
March 12th, 1895.

TERRACOTTA PRESSERS and FINISHERS and MOULD MAKERS. None but steady and first-class workmen need apply.—Address HATHERN STATION BRICK CO., Loughborough and Tamworth.

MESSRS. DEMAIN & BRIERLEY, Architects, Lendal, York, require a first-class ARCHITECTURAL DRAUGHTSMAN at once. Must be well up in Church and domestic work, and able to take charge of drawing office. Apply by letter, stating age, experience and salary required.

COMPETITIONS.

TO ARCHITECTS.

DESIGNS and ESTIMATES are invited by Mr. N. MILLER, of 95, Fishergate, Preston, Lancashire, for a proposed fireproof block of Shops, Offices, two fully-licensed Houses, &c., cost not to exceed £50,000, on an area of about 2,500 square yards.

Premiums of £150, £100 and £50 are offered (in the adjudged order of merit) for the three designs which are selected as the most suitable, and which three designs will become the absolute property of Mr. MILLER.

The assessor to be an architect of eminence, and familiar with commercial property.

A plan of the site, with instructions to Architects, can be obtained from Mr. MILLER, on payment of £1 1s., which will be returned to those sending in bona-fide designs.

All drawings, plans, sections, &c., must be sent to the Borough Engineer's Office, Town Hall, Preston, the name and address of the designer to be in a sealed envelope, enclosed with plans, &c., which will be respectively numbered, but no name, device or motto must be visible on wrapper. The plans must be sent in not later than May 27, 1895.

CHORLTON UNION.

TO ARCHITECTS.

The GUARDIANS of the Poor of the CHORLTON UNION invite COMPETITIVE PLANS for the Cottage Homes and Schools about to be erected by them at Styal, Cheshire. The Guardians offer a premium of £75 for the plan adjudged first in order of merit, £50 for the second, and £25 for the third. Sealed plans, with estimates, must be sent to me not later than Saturday, April 20, 1895.

Full particulars of the requirements of the Guardians and conditions of the competition will be supplied by the undersigned upon a deposit of a fee of £1 1s., which will be returned on the receipt of a bona-fide design.

DAVID S. BLOOMFIELD,

Clerk to the Guardians.

Union Offices, All Saints, Manchester,
February 22, 1895.

S. PONTIFEX & CO.,

MANUFACTURING, SANITARY AND VENTILATING ENGINEERS.

GALVANIZED IRON BINS FOR STORAGE OF GRAVEL AND BALLAST AT ROADSIDE.

Manhole Covers. Side Entrance Covers.

Circular Lamphole Covers.

Sewer Rods and Fittings. Sewer Trolleys.

Cast-Iron Flushing Boxes. Gully Grates.

Sewer Ventilators and Flushing Valves.

CAST-IRON STANDPOSTS, STREET HYDRANTS & DELIVERY HOSE.

Cast and Enamelled Iron Name Plates.

Street Orderly Bins. Galvanized Wrought-Iron Tanks, Cisterns, &c. Shovels, Picks, Pails.

Prompt Delivery at Lowest Market Prices.

Estimates on Application.

S. PONTIFEX & CO.,

22, COLEMAN ST., LONDON, E.C.

The Builders' Journal.

Vol. I., No. 7.

Tues., March 26, 1895.

ILLUSTRATIONS.

A Little Bit at Buchan Hill.....	97	Sketch of Stables, by Banister Fletcher	103
A Sketch by Banister Fletcher	98	Portrait of Professor Banister Fletcher	104
Close Gate, Salisbury	98	A Villa at Hendon	104
Crowland Bridge	99	Oak Door in Billiard Room	105
A Villa: by Professor Banister Fletcher	100	The Yellow House, Bayswater	106
Ladywell: Banister Fletcher, Architect	101	New Scotland Yard	107
Stabling at Churchill: Banister Fletcher, Architect ..	102		

CONTENTS.

The "Rip and Tear Brigade"	97	Plaster Work in Paris	99	Getting on Apace: The New Line to London	107
The Building Exhibition	97	Bricks and Mortar	100	"Stray Thoughts on Competitions"	108
"Peacock" Painters.....	98	The Builders' Journal Competitions	104	Architectural Ironwork	109
Novel Way of Ventilating a Tunnel	98	Men who Build, No. 7—		"Iron and Brass"	110
Society Meetings	98	Professor Banister Fletcher, J.P., D.L.	104	Trade and Commerce	111
Recent Structural Alterations in the House of Commons	99	Architects of To-day: The Building of the Future	106		

The Builders' Journal.

The "Rip-and-tear Brigade." It is an old saying, that about friends, but it has not outworn its truth. Mr. John Burns and Mr. Tom Mann have fallen out; they have emerged from the reply courteous stage and now rely upon the retort dangerous. Indeed "the opposite of this is the truth, and Mr. Mann knows it," sounds to us very like the lie direct. But then Labour Leaders think nothing of a little strong language; it is as daily bread. This quarrel may have consequences; quarrels sometimes do. At any rate, all builders who dwell in terror of strikes may be able to see a little clear sky in this squabble. It arose quite simply. Mr. Mann fell foul of Battersea. It is not an enticing neighbourhood, we admit, but we are aware of no evidence to warrant Mr. Mann stating that "the biggest blackleg district in the trade (engineering) was at Battersea." This is a tall order, for, what with "blacklegism" and "blackguardism," the country generally is wearing a suit of sables. But Mr. Mann, of course, was delivering a speech especially designed to stir the Amalgamated Society of Engineers to floods of mutiny, and there is always a certain poetry of language permissible, only Battersea does not like the "poetry." Now Mr. John Burns represents Battersea, though some people doubt whether Battersea represents Mr. John Burns. The charm may not be mutual. But so long as this member of the Honest John Brigade is Member for Battersea, that choice suburb can do no wrong. Even the "blackleg" is whitewashed! "I am prepared to prove," says Mr. Burns, "that of the men living in Battersea there is a larger proportion of trade unionists than in any other district similarly situated, north or south. How can Mr. Mann say that Battersea is a blackleg district when a trade unionist represents it in Parliament and on the London County Council, and it has sixty-seven trade-union workmen members upon its Local Town Council." The proof is hardly conclusive. Sixty-seven, or even sixty-eight, sound unionists may be in the position of the wise virgins and their lamps. But we have no facts to disprove the rectitude of Mr. Burns' theory, nor is it our quarrel. We are not unmanned. It is quite within the bounds of possibility that Battersea is all Mr. Burns (and our imagination) would picture it; but, even here, we presume there are reservations, for quite a decent number of people—if they were not of the elect—

voted against Honest John at the recent County Council Election. How was that? Is it possible that these were "blacklegs?" If so, there are some thousands of them, which rather proves Mr. Mann's heated view. Because we cannot understand why, Battersea being what it is (according to Mr. Burns) there should be such diversity of opinion. Mr. Tom Mann is the Secretary of the Independent Labour Party and an authority on "Amalgamated Engineering" matters, to boot, and he might know what he was talking about, though we are not sure. But Mr. Burns goes into detail, and is more explicit. "Battersea is the pioneer in direct employ-



A LITTLE BIT AT BUCHAN HILL.
ERNEST GEORGE AND PETO, ARCHITECTS.

ment of labour; it has secured for its municipal employees, numbering upwards of 500, the eight-hours' day, with no reduction of wages; established labour bureaux and relief works for the unemployed, and in its general labour and trade union policy excels all other districts." We hope there will be a general rush to Battersea, for it would seem to be the long sought haven of rest. In winding up his vigorous criticism of Mr. Mann, Mr. Burns (we use the prefix advisedly, hoping against hope!) says: "The Government has in two years reduced the working hours to eight per day of 40,000 people in its employ, a large proportion being of the engineering trades. It has

almost abolished overtime, and in other ways made great administrative and industrial changes in its conditions of employment, whilst recently contractors have been and are being levelled up to trade union conditions. Who has played the most prominent part in this achievement? Not the Independent Labour Party rip-and-tear brigade, but certainly the officers and prominent members of the Amalgamated Society of Engineers, whom Mr. Mann now charges with lack of vigour. In fact, the object of Mr. Mann's speech on behalf of Mr. Barnes was to disparage all other candidates for the position of General Secretary, and to cast reflections on active, honest, non-political officers who will not subordinate the interests of our great society to the shibboleths of the Independent Labour Party and its intolerant leaders. Are we to see introduced into trade unionism the 'spoils to the victor' system? Are we to have executives besmirched, and long, honest, and devoted services cast away? And for what? Simply because Mr. Mann, for the fiftieth time, has changed his social, political, and industrial course, and in the light of this change wishes Mr. Barnes to be the general secretary of the A.S.E.; not because Mr. Barnes is better qualified than others, but because he is for the moment a political friend and ally of Mr. Mann." "Intolerant leaders" from the pen of a Labour Leader is good, but "rip-and-tear brigade" goes a mighty one better. There exist certain thinking and cool-headed people who class both sides to this savage squabble, as of the "rip-and-tear" order.

The Building Exhibition. WE are glad to think that the International Building Exhibition of 1895 will be far and away the best of the series yet held in London, and if the improvements which we shall suggest a little later, be well considered, there is no reason why these exhibitions should not continue to be of much interest and usefulness to those persons who delight and find profit in institutions of the kind. What we are sorry to see is, that many firms idly imagine that a hundred or a couple of hundred pounds lavished on the construction of a stall adds to the reputation of their exhibits, or to any appreciable advance in the business which they serve. This is entirely against the spirit and usefulness of these shows; in our opinion against the welfare of the exhibitors. We should like to see a rule enforced at all future exhibitions, that no goods can be admitted for exhibition later than forty-eight hours prior to the moment of opening. Nothing detracts from the

interest of visitors so much as incompleteness due to the want of energy of many stall-holders. The Royal Institute of British Architects has countenanced the exhibition by allowing many models and drawings to be removed from Conduit Street for exhibition in the Hall. It has also nominated, through its Science Committee, gentlemen to act as judges in the several craft competitions. In the list which has been forwarded to us are many men well able to act in the judicial capacity. We wish the Exhibition the utmost measure of success.

"Peacock" Painters. WE read the other day, in an evening Journal somewhat irresponsible on art matters, of a witty artist painting peacock feathers on a ceiling, what time he lay upon his back. It all seemed very wonderful—on paper—and we still gazed, and more our wonder grew when we came to the passage in which Mr. Whistler's "brush" was described. We are not quite sure whether it was at the end of a clothes-prop, or attached, say, to a common whitewash brush, but the result was equally ridiculous. The parlourmaid's bamboo dusting brush might have done as well. It is time these little fabrications of genius came to a full stop. But the picture of the Impressionist in that attitude came into remembrance when we read the judgment in the French Courts upon the Eden matter. It struck us that Mr. Whistler



A SKETCH BY BANISTER FLETCHER.

was again "floored"—in a different sense. Whatever may be thought of the merits of Mr. Whistler's picture, there can be no doubt about its novelty. The trunk of one lady—to use the slightly objectionable word common in the case—with the face of another, is a pure Caprice, neither Nocturne nor Interlude, and Mr. Whistler has never done anything more funny. Whether Lady Eden likes herself under the new arrangement, whether Sir William has become charmed by the face of "Miss Hall," and whether Miss Hall was entitled to claim "her own," or, at least, a replica of herself, are points outside the issues, in the first two counts, and decided in the negative so far as Miss Hall is concerned. The picture may be *her*, but it is not "*hers*." Neither is it Mr. Whistler's, for he sold it, and received his hundred guineas. Neither are the hundred guineas his, for Sir William's order of a portrait of Lady Eden has not been fulfilled. Finally, Mr. Whistler having "damaged" Lady Eden (we wonder what Miss Hall would say to this!) must pay 1,000*l.* and a penalty if he further delay delivery. To make the severity complete, Mr. Whistler must not again touch the portrait. After all, people, even painters, may leave England and fare worse. We may be "Philistines," but British juries have a secret sympathy for artists; they make allowance for eccentricity and stand somewhat in awe of genius. Not so in France. Mr. Whistler having fore-sworn America, and found Paris unkind, may wander back to England—home of the persecuted and the alien. He and Mr. Wilde are Adversity's bedfellows.

THE Town Council of Crieff purpose erecting a hospital for infectious diseases at Alickmore at a cost of £1,000.

NOVEL WAY OF VENTILATING A TUNNEL.

THE Simplon Tunnel is now being constructed between Switzerland and Italy. This tunnel, when completed, will be 12½ miles long. The nearest tunnel, from a longitudinal point of view, at present is the St. Gothard, which measures 9½ miles, then comes Mont Cenis, 8 miles long, and the fourth is the Hoosac, 4½ miles. According to the proposal of the engineers in charge of the preliminary work, the two tracks will not be carried in a single large tunnel, but in two small parallel lines, about 58 feet apart between the centres, and connected every 660 feet by cross-cuts. The average area of the section of each of the tunnels is estimated to be 250 square feet, the width and height will be 16 feet and 18 feet respectively. The plans of the contractors are quite different from the general methods which have been hitherto adopted. This change is due to a stipulation in the contract, providing for the completion of one of the tunnels first, and the construction of a working gallery along the line of the second immediately afterwards. To meet this stipulation the directors have decided to drive two galleries from each end, as the basis of the two tunnels, and to connect them at equal intervals. One gallery will be enlarged to the full cross-section to form the first tunnel, while the second tunnel will only be completed when the first is not sufficient for the traffic. The clear section of the second gallery will be used for ventilation, and will have an area of 86 square feet. Air will be blown into it by powerful fans, and elaborate arrangements will be made to pass it in through the second, so as to come out through the second gallery. Both galleries will be driven by Brandt hydraulic drills, three or four at each heading, and it is calculated that the progress made with them in the work will be at the rate of nineteen feet a day. It is also stated in the report that considerable time will be saved by reason of recent improvements in explosives, and by the new method of throwing the blasted rock backward with hydraulic power at the moment of the explosion. The rock, instead of lying within a few feet of the face, will be scattered for some distance, and the drills



[CLOSE GATE, SALISBURY.]

can be set up again in a shorter time. The tracks laid for carrying rock and supplies in and out of the galleries are connected through each cross-cut, and have a gauge of 2 ft. 7½ in. For doing this work the contractors are to receive £1,808,000 when the first tunnel and the second gallery are complete, and if this part of the undertaking is not completed before the end of 1900, they are to be fined £200 a day for the remainder of the working period. There is a previous payment of £290,000 when the power plant and other apparatus for working are set up; but the large payments are not due until the first tunnel is ready for regular traffic.

SOCIETY MEETINGS.

Edinburgh Architectural Association.

The members of the Edinburgh Architectural Association recently visited the village of Upper Liberton, and were conducted over Liberton House, the former residence of the Littles, the owners of the Barony, by Mr. G. Godfrey Cunninghame, the present occupant, who directed the attention of the party, in the first place, to the ground plan of the house, consisting of two blocks of buildings at right angles to each other, with a circular turret or tower in the angle, these, together with another block or annexe, enclosing on three sides a small square courtyard, the fourth side of which was once shut in by a wall and gate of defensive character. Special interest attaches to Liberton House in the fact that it belonged to a transition period, when defensive architecture, even in the case of structures without any claim to rank as a castle or fortress, had not yet been wholly abandoned, and when the state of society made it necessary to retain safeguards against sudden attack. Though disfigured externally by an alteration in the height of the walls, which had been considerably raised, and in the pitch of the roof, which had been depressed, the outlines of the original elevation were still clearly traceable. Lastly, the "Nelson room," a reconstruction of recent date, was explained to be an attempt arising out of structural considerations to introduce the half-timbered work associated, at least in Scotland, more often with the exterior than with the interior of the edifices in which it occurs.

Architectural Section of the Glasgow Philosophical Society.

This Society held its last meeting of the session on the 18th inst., Mr. T. L. Watson, F.R.I.B.A., President, occupying the chair. Mr. Lewis R. Crosskey, of Glasgow Technical College, read a paper on "Industrial Art, with special reference to the Training of Artisans." He said, the art instruction given at industrial art classes must bear directly on trade requirements, and could only be given by men having a complete knowledge of the trade. It must be given by one in close touch with the trade to which the student whom he is teaching belongs. Mr. A. Lindsay Miller, in supporting the view of the municipality helping trade technical schools, said, they could not in this country equal many varieties of German-made goods, and the secret of it was the splendid system of technical instruction carried on in special schools by the Government of that country. Mr. T. L. Watson was re-elected as President, Mr. William Howatt as treasurer, and Mr. A. Lindsay Miller as secretary.

Institution of Civil Engineers.—At the ordinary meeting of the Institution on the 19th inst., Sir Benjamin Baker, K.C.M.G., vice-president, in the chair, a paper was read on "Steam Engine Economy—Condensing Engines," by Mr. Henry Davey, M.Inst.C.E. Development of the Experimental Study of Heat Motors is to be the subject of the "James Forrest" lecture this year, the lecturer being Professor W. C. Unwin.

Civil and Mechanical Engineers' Society.

At the recent ordinary meeting of the Civil and Mechanical Engineers' Society, Mr. S. à Court, A.M.Inst.C.E., Vice-President, read a paper on the subject of "Passenger Lifts." Referring to the earlier forms of passenger-lifts in use in England, the author gave details of various improvements lately introduced, and gave figures to support his view that at even present prices the electric lift is a serious competitor with the hydraulic lift. Possible causes of accidents were then detailed, also safety appliances, &c. The author said that the percentage of accidents was very small, considering that something like ninety millions of passengers were carried annually in London alone.

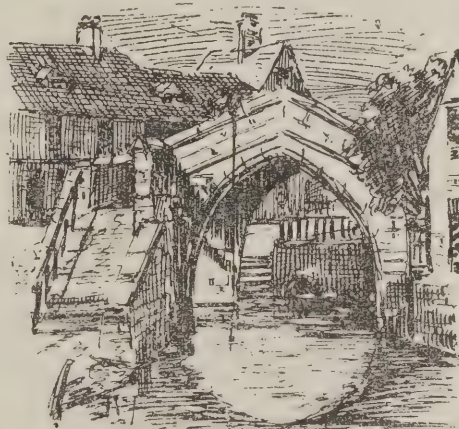
BUXTON Wesleyan Chapel is undergoing extensive alterations. A chancel is to be formed, with seats for the choir, and the pulpit will be placed at the north side. A new organ is to be built at a cost of £750, and the total expenditure will be about £1,200.

RECENT STRUCTURAL ALTERATIONS IN THE HOUSE OF COMMONS.

A SELECT Committee of the House of Commons was appointed last year, to consider any or what arrangements could be made to improve the accommodation provided for Members and Representatives of the Press. Conformably to custom, this consideration was duly given, and the usual recommendations were made. The latter were also promptly carried out. This, however, is not according to custom, since Select Committees are proverbial for a seemingly incurable dalliance and delay. We are pleased to credit such a body with the best of intentions, and with almost immediate results. The Select Committee on the House of Commons' accommodation has been prudent enough to avoid suggested "building courses" that would have merited condemnation. It will hardly be affirmed that the Houses of Parliament, at which some members now-a-days scoff because it does not satisfy every idiosyncrasy, is a flawless structure. But that the design of Sir Charles Barry's masterpiece is "gingerbread," though the material of which the building is composed may be imperfect, is an untruth, apparent to any being who is not bereft of all architectural instinct. At any rate, if some parts of its exterior be open to criticism, it was generally apprehended that little room remained for amendment or improvement in its beautifully proportioned chambers and lobbies. The counsels of the Select Committee in question show, however, that there exist unappreciative and unreflective legislators who would raise the chambers and build them over again; but fortunately financial considerations and the good sense of the remainder and majority of the Committee prevented the defacement of Sir Charles Barry's designs.

It appears that having come to the conclusion that it was undesirable to build a new Chamber, Mr. Plunket, the Chairman of the Committee, was commissioned to interview the authorities of the House of Lords to ascertain whether by re-arrangement additional space could be secured to the House of Commons. The Upper Chamber was complaisant; it was not surcharged with a fierce desire to thwart the wishes of the People's Representatives. It allowed the three rooms occupied by the Railway Commissioners and three of its ground-floor terrace rooms to be given up to the House of Commons, whilst Mr. Peel, the retiring Speaker, consented to the removal of his train bearer from his quarters. These concessions provided the basis for the rearrangement and alterations which have recently been completed. In the economy of the Parliamentary Representatives gastronomic needs take high place; it was, therefore, natural that the culinary conditions should prove to be defective. It was at first proposed to transfer the kitchen to the old committee rooms at the top of the building, the proper place for the kitchen if practicable. But there were drawbacks and difficulties. The alterations would take too long and cost too much—some £15,000 to £20,000; it would, moreover, be difficult to serve dinners on the ground floor as well as on the main dining room floor, and the work of the Committees underneath might be interfered with. The kitchen accommodation has, therefore, been entirely remodelled by building into the Common Inner Court, absorbing the rooms formerly occupied by the assistant engineer, and by utilising and redistributing the old kitchen space. The former Members' dining room has been converted into a service room, with four lifts working in direct communication with the kitchen, the grill from the large dining room having been removed into this room. The Members' large dining room has been restored by setting back the screen and the removal of the grill, and the main floor smoking room

has also been converted into an additional dining room. The room hitherto employed as a ladies' dining room has been put to use as a dressing room for members, and equivalent dining accommodation for visitors has been provided by the conversion of one of the minister's rooms adjoining the Terrace and of the Terrace reading room into visitors' dining rooms. Another minister's room on the Terrace has been allotted to the manager of the refreshment department, who gives in exchange to the minister the room which he formerly occupied. The "E," or Grand Committee room has been appropriated to members as their principal smoking room, and the Terrace minor smoking room has been divided into two rooms. In addition to the converted dressing room for members, seven cubicles have been fitted up for dressing in, whilst in the adjoining chamber a hair-dresser has been established. On the opposite side of the passage four baths have been constructed. The Standing Committee on Law is to be accommodated in the large room at the north-west corner of Westminster Hall, which room is to be available, when not required by the Committee, for members' private secretaries. The evicted Railway Commissioners have been provided with accommodation outside the house, and half the space previously in their occupation is now set apart for the use of members receiving deputations or holding conferences,



CROWLAND BRIDGE.

in addition to one of the former conference rooms, the second of which is to be allocated to that modern institution, the type-writer. The octagon room is also to be put to conference purposes on arrangement with the assistant serjeant-at-arms. The four rooms surrendered by the Speaker's train-bearer have been allotted as follows:—One to the librarian in lieu of that at the foot of the Ladies' Gallery staircase, given up for a ladies' waiting room; one to the chaplain in place of that handed over to the press; and two have become ministers' rooms in compensation for those required in connection with the revised dining accommodation for visitors. The other half of the space obtained from the Railway Commissioners has been assigned to the Examiner of Private Bills. The assistant serjeant-at-arms has moved into the examiner's rooms, and the assistant engineer has been housed in the rooms secured from the House of Lords. A room for boy messengers, as well as additional accommodation for the police, has been provided. The post office has been enlarged by the addition of space from under the staircase leading to the gallery of the House, and additional windows have been opened to the lobby for the convenience of members. Better accommodation has been given to the maid-servants occupying the old committee

rooms, by the division of one of the rooms and the provision of a bath-room. A barrier rail has been placed at the back of the bench in front of the strangers' seats, to facilitate the arrangements made for allowing strangers sitting under the gallery to remain during divisions. The electric lights in some of the principal rooms and library have been placed at a higher elevation and redistributed, in order to diminish the glare of which members used to complain. A glass and iron shelter has been erected at the external entrance to the ladies' gallery, and electrical communication has been established, as an experiment, between the House and the new smoking room (formerly the Grand Committee room). The foregoing are the alterations made, mainly, in the interests of members. The other changes benefit the Press and its staff of messengers. New entrances to the reporters' gallery have been constructed at each end, and the collisions and inconvenience which resulted from the reporters converging from each side of the gallery to the central entrance on going out and with those incoming, are now obviated. The reporters' kitchen has been enlarged by the addition of a tea-room. There has been a reservation of the upper corridor for the Press. Two small smoking rooms have been thrown into one. The *Times* staff, which has this session been increased for the purpose of preparing the Hansard Debates, has been transferred to the room hitherto in the possession of the Chaplain of the House. Last, but not least, the room which is on the site of the once famous Star Chamber, has been given over to the boy messengers of the Press. Thus the whirligig of time brings its revenges. The alterations have cost close upon £20,000.

PLASTER WORK IN PARIS.

THE plain plasterer in Paris is inferior in skill to an average plasterer in London, or even to the men of some of our most secluded towns and villages. They do their work in a different way, and when accomplished it is inferior, having a bad line and uneven surface. Plaster and sand are the principal materials used on walls and ceilings. No lime and hair-mortar seem to be employed. This method of working is very slow, judging from the amount of work done by five men in half an hour, during which time I watched them. I can safely say that these men, who appeared to be a fair sample, would not be equal in efficiency to three ordinary plasterers in London, whose work, when finished, would be superior to that of the Frenchmen. I do not judge alone from what I have seen, but also from the answers I received to many enquiries in other places, where men were at work. But, although they are inferior in their method of work, they have many good qualities which it would be advantageous to Englishmen to learn. The French plasterer's tools are clumsy in the extreme, ill shaped, and heavy. It seems to me to be all but impossible for men to produce good clean work with such implements. In all the buildings that I examined I did not find anything extraordinary with reference to plain plastering; on the other hand, in reference to ornamental plastering it must be said that every building seemed to excel its neighbour in the quantity and quality of enrichments, which are everywhere introduced with consummate taste, with just proportion, and in good keeping. This seems one of the principal advantages that has been gained in the buildings in Paris. Ornament is before the eye wherever it turns, either in wood carving, in stone, in marble, plaster or other composition, and, notwithstanding the great quantity of ornament, there is none that seems overcrowded or misplaced.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
26th March, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

YET another unfortunate attempt on the part of the London County Council to interpret the law as it is understood at Spring Gardens. Mr. J. Gover is a builder. The complaint against him, made at "Marlborough Street," was that he opened windows in a party wall. The defence was that the wall could not be called a party wall, as it stood upon land absolutely belonging to the defendant, and that the new window had been opened with the consent of the owner of the property adjoining. The wall, for a certain portion of its height, might be so far regarded as a party wall as it was built against the wall of the adjoining premises. Above that building it was an external wall, and was, therefore, outside the provisions of the Metropolitan Building Act. Mr. Hannay, in giving his decision, said there was nothing in any part of the Act to support the Council's contention, the wall in dispute being, where the windows were placed, an external wall. In fact, there was nothing in the Building Act, or any reported decision, to make it a party wall in law. He, therefore, dismissed the summons, and awarded ten guineas as costs to the builder. The County Council evidently cannot understand its own Act, and Sir John Bridge and Mr. Hannay are comrades in the conflict. But the fight is unequal. The Bench will prevail while the Council will go by the board. But we would suggest that a little night-schooling might do the Council good, to begin, say, with Latin: "Balbus is building a wall!"

It will interest art-folk to learn that this year Mr. J. W. Waterhouse will exhibit the most important picture he has painted for some time. The subject is "St. Cecilia," and the motive is supplied by the lines from Tennyson's "Palace of Art." Two angels, both playing viols, are kneeling before the sleeping Cicely, who is placed on a large stone chair, some illuminated music on her knee. The angels are on the carpet before the "gilded organ-pipes"; cypresses and other Italian trees are in the landscape, and beyond is the sea with many masts of much shipping. This highly decorative theme is finely treated, and the figures are larger than those usual with Mr. Waterhouse.

ANOTHER Artist who is wandering a little from the old pathways, is Mr. Marcus Stone, who will exhibit at the forthcoming Academy a picture of a somewhat different *motif* from those in recent years. He calls it "The Sailor's Sweatheart." A delightful cliff garden is bounded by an old broad grey wall; a fair girl with a beautiful face and figure leans on the wall and gazes fixedly over the sea beyond. The costume is of the last year of the last century, in white muslin, and she

wears an old-fashioned straw hat; in her hand is a bunch of forget-me-nots and his letter. A cat sleeps on the wall. In the shadow are the young lady's father and mother, who look up from their work and newspaper respectively with half-amused, half-sympathetic tenderness. Out beyond is a landscape, and beyond that, again, the sea. The "story" needs no further telling.

EAST LONDON may awake to hear that it is proposed to hold an East London Trades, Industries, and Arts Exhibition at the People's Palace next year. The preparations are far advanced so far as financial help and "influence" are concerned, though the projectors of the scheme would have done well to add the names of a few representative workmen to the long list of distinguished persons who form the Committee. Several of the City companies are taking the matter up, and so are many of the big employers of labour in East London, whilst the presence of the President of the Royal Academy on the committee shows that something is to be done for art. It is surprising how fond the East-End is of pictures; you have only to go to Bethnal Green Museum on a Saturday night to see and hear something worth remembering, including many naive comments on art.

THE weather is biggest Vandal of all, exceeding in strength the rude blow of revolution or that murderous "restoration" process, the ruin of so many fine fabrics.



A VILLA: BY PROFESSOR BANISTER FLETCHER.

We hear with regret that the unrivalled façade of the Louvian Hôtel de Ville has been seriously damaged by the weather. The magnificence of this Gothic town hall has long excited the wonder of architects and students, and though Belgium is so rich in buildings of the kind, not one of them surpasses that of Louvian in wealth of superb detail. The hall is of a later date than the not less famous Hôtel de Ville at Brussels, and it is a tradition that the citizens of Louvian, jealous of the fame of the municipal palace of the neighbouring city, determined to have a building of at least equal magnificence. The "master of the works" was Mathieu de Layens, who was engaged at the time as city architect, and he seems to have prepared the plans as part of his ordinary duties. The city archives reveal the fact that all that he got for the design was five crowns, the equivalent of about thirty-five shillings of our money. The building underwent an elaborate restoration between the years 1829 and 1841 under the direction of MM. Goyers and Everaerts, but the stone used was so friable that further repairs are already absolutely necessary, the walls of one of the towers having recently almost crumbled away. The authorities have accordingly decided that the venerable building shall be once more "restored," and the necessary credits have been already voted.

WITH the advent of building weather, the work at the Empire of India Exhibition, Earl's Court, is being rapidly pushed forward. Over 2,000 workmen are employed on the extensive plans laid out by Mr. Imre Kiralfy, and which now begin to assume definite shape. On the old arena side of the grounds the work is well in hand. The decoration of the Queen's Palace—a building 500 ft. long, to be devoted to Fine Art—has already commenced, while the Ducal Palace, the Hall of the Rajahs, and other buildings are nearly completed. One thousand four hundred native artisans will reach England early next month.

ONE by one the links with the past are breaking. The death of Mr. H. G. Hine, the venerable Vice-President of the Royal Institute of Painters in Water-Colours, removes another name from the diminishing band of water-colour painters whose feeling and sympathy are more in touch with a past generation than with modern cults and schools. As his colleague, the late Thomas Collier, carried forward the traditions of Cox and De Wint, so Mr. Hine's sweet and poetical pictures of downs bathed in sunlight may be said to be founded on the art of Copley Fielding, though with a certain solidity and absence of mannerism that Fielding never attained to. Mr. Hine was an octogenarian, but died at work, painting, even in his later years, with a feeling for purity and delicacy of colour very remarkable, if not unique, in a man of his advanced age. It will not be easy to find a worthy successor to this laureate of the Sussex Downs.

THE Galleries, private and public, are very busy just now, and the respective shows claim their daily little "crowd." At Messrs. Dowdeswell's Mr. Denovan Adam, of the Royal Scottish Academy, who has been working extensively amidst some of the finest scenery in the North, is exhibiting a kind of artistic almanack of weather. Each month, from January to December, has had special attention devoted to it, and nearly every canvas contains its rough Scotch cattle, without whose presence this artist would scarcely seem represented on his own ground. Mr. Adam is a colourist who delights in brilliant contrasts and strong harmonies. At the Carlton Gallery, a collection of paintings by Mr. C. E. Johnson, the well-known Member of the Institute and exhibitor at the Royal Academy, may be viewed. They consist of picturesque landscape scenery in England, Scotland and Wales, selected with the artist's customary observation of different atmospheric effects. Besides Mr. Johnson's landscapes, Messrs. Borgen and Turner are showing one of the last productions of the late M. Meissonier, namely, "Le Postillon," exhibited at the Salon of 1893.

THE earliest remaining work in York Minster, said Mr. C. F. Mills, at Toynbee Hall, was the Norman crypt of Bishop Roger. It was a typical English church, with square, not apsidal, ends, lofty lancet windows, and three towers—the two western towers and the great one in the centre of the building. York, too, was exceedingly rich in quaint gargoyles. The great west window was much the finest in England, though that at Carlisle was said to be more perfect. The real magnificence of York was only revealed beyond the screen and in the great choir. A peculiar beauty of York, which it possessed, in a higher degree, perhaps, than any other of our great fanes, was the effect of colour from the stained-glass windows, so exquisite in the play of the rising and falling light. Perhaps we did not appreciate Perpendicular architecture enough in the opportunities it afforded for great windows. The ideal it aimed at seemed to be a translucent tabernacle

ribbed with stone. The Chapter House at York was singular in having no central pillar like other buildings of its kind. Another remarkable architectural feature was the triforium, the passage along which was outside, and not inside, the cathedral.

By the way, the Easter Exhibition of Pictures at Toynbee Hall will be opened this year by the Right Hon. A. J. Mundella, M.P. Briton Rivière will be the artist principally represented, but the committee have been successful in securing such pictures as Alma Tadema's "Shrine of Venus," Peter Graham's "The Gently Heaving Tide" and "Evening," Sir Frederick Leighton's "Dædalus and Icarus," and Hubert Herkomer's "God's Shrine." Burne Jones, Vicat Cole, H. W. B. Davis, Fred Walker, MacWhirter, David Murray, Henry and Albert Moore, Clausen, Wyllie, are artists whose principal works East-enders will be privileged to see, and a fine landscape by Corêt, the great French painter, will be a feature of the exhibition. The exhibition will be opened on April 2, and remain open for three weeks.

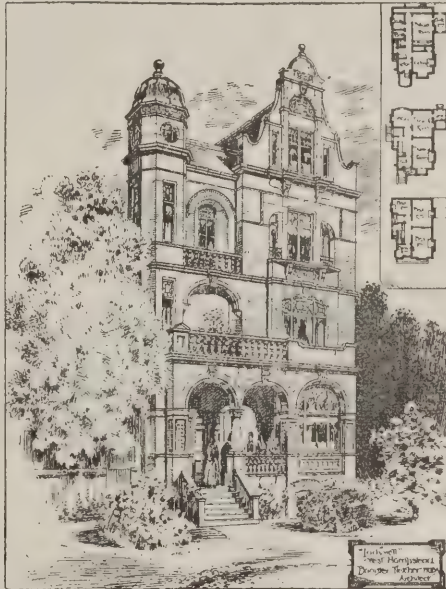
ONE who evidently knows something of the practical side of things, writes with regard to the proposed harbour at Dover: It is rather surprising to learn from the discussions which have taken place upon the proposal by the Government to construct a national deep-sea harbour at Dover, that it will cost some £5,000,000. In these days of steam appliances and long experience in the construction of such works, it will be found that that sum of money will construct two first-class harbours on the lines of the scheme of 1844, and in addition dry and wet dock accommodation, all on reclaimed land. A sum of £2,500,000 will be found sufficient to provide a harbour on the lines of the scheme of 1844, of an area of say 500 acres at least, reckoning from low-water mark, including half-a-dozen graving docks, and splendid accommodation in the shape of wet docks, where vessels fitting out or under repair can lay in 30 ft. of water at all states of the tide. Another question is that of time, which has again been variously estimated. There have been large harbour works constructed quite lately of a first-class description, and at a rate of speed which would certainly justify the assertion that the 1844 scheme might be completed in from twelve to fifteen years with perfect ease and economy.

THE design of the medal to be issued by the Corporation of the City of London to commemorate the opening of the Tower Bridge has been executed by Mr. Frank Bowcher, of 6, Clifton Hill Studios. On the obverse are the portraits of Her Majesty the Queen and, their Royal Highnesses the Prince and Princess of Wales, in bold relief, and on the reverse a perspective view of the Bridge with the City Shield in the exergue, while the Bridge House mark may be seen above the towers. The medals bears the inscription, "The Tower Bridge, opened 30th June, 1894, on behalf of Her Majesty Queen Victoria, by H.R.H. the Prince of Wales." Mr. Bowcher has had the honour of submitting the model to H.R.H. the Prince of Wales, who has been pleased to pass a favourable criticism upon the portraits.

THE splendid collection of gold ornaments and gems in the British Museum will shortly be transferred to and re-arranged in a new room which is now being fitted for them, and where, with improved light, they will be seen to far better advantage. The greater portion of the gems will be displayed in a large centre case. Surrounding this central case on three sides will be three lines of connected table-cases. Those on the north side

will contain a series of archaic gold ornaments from the Greek islands; the celebrated glass vase popularly known as the Portland Vase will be placed above. On the west side will be arranged the archaic Greek island gems and the scarabs, and also the later Greek and the Roman gems. The choice collection of mediæval goldsmiths' work and enamels will be exhibited in a case on the south side, and above will be placed the very remarkable Royal gold cup acquired in 1892. The cup weighs nearly 68 ounces, and in its present condition measures nine inches in height and is seven inches across the cover. The cases lining the walls of the room will contain ancient and mediæval gold ornaments, including an extensive series of finger rings of all periods; while above these will be exhibited a series of frescoes from Pompeii, Herculaneum, and Rome.

LIFE is not absolute heaven in a flat, particularly if the man in the "let" above snores. We commend an interesting point of law, recently raised before Mr. Curtis Bennett, to the attention of all flat builders. A young man lived in a flat; above him lived one who snored like an ox, so that he could not sleep. The legal question is this: Are we to hold in the young man's case that the



LADYWELL: BANISTER FLETCHER, ARCHT.

man above him snores, or that the landlord sleeps? The young man wanted a summons against the landlord. He added that he could not sleep for three years in the kitchen. If this means three years on end, the contention seems valid; if it means that he will lie awake there three years before dropping asleep, it seems improbable. But Mr. Curtis Bennett could not satisfactorily settle the question. Only a wide-awake man can settle a "snorer."

MR. ACLAND, Vice-President of the Council, struck a bright and happy note in his address at the laying of the memorial stone in celebration of the rebuilding of the larger portion of the Woolwich National Schools. In these days of crowded populations and much poverty, which was so difficult to grapple with, the more they could make their schools bright and healthy places, whatever the character of the homes of many of the children might be, said he, the more they were doing for the benefit of this and future generations. Light, warmth, and a good atmosphere and bright surroundings were essential to the effective carrying on of the great work of national education. Many people thought the Education Department was a mechanical institution, and that there were no human beings inside it. That was

not so, for the officials took a deep personal interest in their work, and every word of encouragement they received helped them to become more elastic, to get rid of red tape, and to become more human in all that they did. The humanising of officialdom is a useful work, in which others beside Mr. Acland might well engage. The "department" still lacks "heart" and sympathy. Mr. Acland's words may be regarded as a sincere, if slow, awakening.

MR. WALTER CRANE has made a set of eight pen drawings to illustrate the "Merry Wives of Windsor," and they have been published in an edition *de luxe* by Mr. George Allen. These form the continuation of the series by the same artist illustrative of Shakespeare. Mr. Crane has many aptitudes as an illustrator of Shakespeare. One of them is a sense of archaic quaintness. Another is a sense of character. Master Slender looks the fool that he is. The merry wives never lose their sense of the joke, and the fat knight is manifestly stuffed with the meaner vices. The manner of execution is large and free-handed, and it has to be so, in the treatment of the figures, to counteract what would otherwise be the excess of delicacy of detail in the backgrounds.

CITY clerks are asking why they should not have a little "Factory Act" legislation. It certainly seems an anomaly that while so much is done for the belligerent workman, the quieter clerk gets small heed. He has been too concerned with his living to pay much regard to sanitation hitherto. But the National Union of Clerks is now awakening to the situation. A deputation waited upon the Home Secretary the other day, and urged that some such protection as that afforded in factory legislation should be extended to clerks, especially to junior clerks in the entering rooms of City warehouses, who have often to work excessive hours in over-crowded, badly ventilated rooms, and without proper sanitary accommodation. Mr. Asquith said the grievances as to overcrowding and insanitary conditions did not belong to his department, but came within the public laws of health, and they might have these laws more rigorously enforced by giving information to the local officers of health, or by bringing pressure to bear upon the local authorities. The question of excessive hours of work by clerks in warehouses was not dealt with expressly by the existing law, and could not well be included within the scope of factory inspection; but he would endeavour to ascertain whether the alleged evils in that respect widely prevailed, and would consider what could be done under the circumstances. This was somewhat cold sympathy. Mr. Asquith never forgets to speak like a lawyer.

A GLASS case, containing neither gold, jewels, nor objects of art, yet said to be worth £10,000 was recently one of the attractions at the Royal Institution. The contents were a variety of globules and cast bricks of unpretending appearance, used to illustrate Professor Roberts-Austen's lecture on the rarer metals and their alloys. A slab of palladium, the largest in the World, was valued alone at £7,000. Professor Moissan in France and Mr. Claude Vautin in England have, by different methods, succeeded in reducing and casting these highly infusible metals, most of which have hitherto been seen only in minute and precious fragments; but whereas M. Moissan with his electric furnace has never succeeded in eliminating carbon from his products, which are, therefore, really carbides, Mr. Vautin, by the ingenious use of finely-divided aluminium as a reducing agent, can produce large quantities of almost any one of the metals from their

oxides in an absolutely pure condition. The value of these metals, even if they could be produced commercially on a large scale, is still doubtful, although indications of their usefulness are not wanting. Chromium, for instance, has made a revolution in steel projectiles, while aluminium threatens to become a popular craze. The experiments conducted at Woolwich, under the supervision of the Ordnance Director, shew, moreover, that we may expect from these metals with high fusing points the peculiar power they possess of strengthening other metals. The results obtained in this direction by alloying with such metals as titanium, tungsten, palladium, and osmium, afford grounds for a new generalization in metallurgy.

A MONUMENTAL stone has just been placed in Peterborough Cathedral, over the spot where the remains of Queen Katherine of Arragon were buried on the north side of the chancel. The cost has been defrayed by the "Katherines" of England, Scotland, Ireland, America, and others, Mrs. Clayton, wife of Canon Clayton, being one of the originators of the movement. The inscription is as follows:—"Here lies the body of Katherine of Arragon, Queen of England, and first wife of Henry VIII., who died at Kimbolton Castle on the 8th day of January, 1535-6, aged forty-nine years."

MR. SHAW-LEFEVRE'S suggested method for getting at the Water Companies was ingenious. The Local Government Board may hold an inquiry and order improvements to be made "if at any time complaint as to the quantity or quality of the water supplied by a company in London for domestic purposes was made to the Local Government Board by memorial in writing, signed by not less than twenty inhabitant householders paying rents and supplied with water by a company." The expense to be incurred would simply be that of appearing as witnesses, and the outcome might well be that the companies would be compelled to relay their pipes, or protect them in such a way that the frost could not penetrate them.

IRONWORKERS and others, with a taste for armour and arms, gathered to the sale at Christie's of Mr. Edwin J. Brett's famous collection. It was some time since these auction rooms contained such an array of warriors' suits, old helmets, pistols, daggers, spears, and battle-axes, many of them rare in form and remarkable as to workmanship. Particularly noticeable were two fine suits of engraved armour of the sixteenth century, uncommon in design and much ornamented; a rare tilting heaume of the fourteenth century, similar to the one that hangs over the tomb of the Black Prince, in Canterbury Cathedral; a sallad, with movable visor, somewhat like those worn by the Nuremberg patricians, Stephen and Lucas Baumgartner, in their portraits by Albert Dürer, in the old Pinacothek, at Munich; an Italian wheel-lock gun, the stock of which is minutely inlaid with the story of Perseus and Andromeda and other classical subjects, besides elaborate ornamentation of flowers, fruit, birds, &c., made in 1560; a sixteenth century morion of bright steel, embossed on one side with a Roman equestrian combat, and on the other Cæsar being offered the head of Pompey, after the defeat of the latter's army at Pharsalia; a circular shield of blued steel, finely inlaid, and an armet, which is probably one of the earliest types of closed helmets (1490). The collection was full of quaint and rare things.

ARCHITECTS and builders will be interested in the accounts which are appearing of the enormous preparations for the exhibition to be held at Nijni-Novgorod in 1896. It will be the greatest show of its kind ever held in

Russia, and its purely national character will give travellers from the West a better idea of Russian life than any number of books. The buildings will cover an area twice that occupied by the last Moscow exhibition, and twelve of the sections have already been completed, viz., the Central Building, the Concert Room, the Military and Naval Section, the Scientific and Scholastic, Bird-rearing, Forestry, Fruit Culture, Agricultural Machinery, Handicrafts, Trade and Navigation, Siberian, Central Asian, and Caucasian Sections, and the offices of the Administration. The remaining buildings will be ready in the autumn. The exhibition and town will be illuminated by the electric arc and incandescent lights, and an electric railway and a service of balloons will convey visitors from one side of the Volga to the other. The cost of the lighting, railway and balloons is put at £20,000. What the exhibition buildings will cost is not stated.

WITHIN ten years, it is said, the city of New York will be heated and lighted, have all its machinery driven, and its laborious work done, by the utilisation of the forces of Niagara Falls. The idea has long been a dream. But two difficulties have always stood in the way—first, the purely mechanical obstacles to turning any part of so strong a current into electrical energy, and, secondly, the impossibility of profitably conveying electricity any great distance from the place where it is generated. The first of these has been



STABLING AT CHURCHILL:
BANISTER FLETCHER, ARCHITECT.

overcome, and there are now on both sides of the Falls great works in course of erection that will generate, between them, electricity equivalent to three-quarters of a million horse-power. What this means may be judged from the fact that, a few years ago, it was officially estimated that all the machinery in New York State only amounts to 450,000 horse-power. The problem of transmission is a more serious one. The highly elusive character of electricity causes it to escape at every possible point, in spite of the most careful insulation. Mr. Nicolas Tesla, Edison's young rival, believes he has at last hit on a plan by which electricity can be conveyed several hundred miles without appreciable loss. If this problem of transmission is really overcome, New Yorkers and others will, it is said, have the forces of Niagara laid on to their houses for every-day use at a cost of less than £3 each horse-power a year.

AN interesting collection of sculptures in bas-relief gathered by Mr. E. P. Maudslay has been presented to the nation. From an art point of view the attraction of these bas-reliefs is not great, though they have much that is characteristic of primitive South American sculpture. One of the most notable pieces probably formed part of a flight of steps, and represents some twenty seated figures looking to left and right, and in others there are studies of the human figure and attitudes.

THE committee in charge of the Photographic Exhibition to be held at the Imperial Institute during the present year is making special efforts to introduce an historical element into the collection. Section A of the show will be devoted to illustrations of the results of the early processes, and Section B will contain works denoting progressive developments. These departments would, it is believed, be materially strengthened and made more complete by a loan collection of specimens of photographic art from its earliest pioneers, and from others who have made the art-science a study through the successive stages of its development. All interested in photography are invited to take an active part in the proposed display. The Council of the Imperial Institute, in their desire to further the scheme, have provided for this historical collection well-lighted space in the building.

OF late years (says a writer in *Blackwood's Magazine*) the most vital art movement in Scotland has been in the West. Although the coterie of painters known as the "Glasgow School" does not include all the artistic talent in that city, the name, in virtue of combination and unity of purpose among the members, and because they have so often exhibited together, has become a convenient descriptive term. The influences which have called it into being are complex; but the most powerful are undoubtedly Whistler's art (which blends the great traditions of the past and the wonderful decorative arts of the Far East) and the training several Glasgow men received in Paris, though from the pictures alone it is impossible to say who these have been. Desire for form as the basis of art, appreciation of the value of true tone and of the charm of decorative effect, increased regard for unity of effect—these are directions in which the new impulses have made themselves felt, and they are such as make for the purely artistic motive and the pictorial expression of thought. Some of these are not exactly characteristic of Scottish art as a whole; and it is not strange that, in trying to profit by the discoveries of French art, they should have adapted—not adopted—French methods to their ends.

THE list of the members of the Academy who are to winnow what will be sent to Burlington House, and make the ultimate choice of what shall be hung, is always a subject of interest at this time of year with the outsiders. So much so that it is said you can foretell what kind of an Academy it will be when you read that list in March. Of course some particular section of art is sure to be depressed, and this year it is the landscape painters. Here are the five R.A.'s who will judge: Messrs. Wells, Sant, Yeames, Orchardson, and Prinsep. Two out of the five portrait painters, and not a solitary landscape painter amongst them. It looks ominous. The young men, the new school, whose teaching is French, and whose sympathies are impressionist, they, one and all are peculiarly disconsolate. They give the most gloomy outlines of the kind of landscape which Messrs. Wells, Sant, Yeames, and Prinsep are likely to approve. Probably matters will not turn out at all so badly.

DUMFRIES is to have a new Academy, which is to be erected from the designs of Mr. Frank Carruthers, architect, of Dumfries and Lockerbie. We have seen a photograph of the architect's drawing, and from this we learn that the style will be pure Classic. The principal façade will have a Greek portico, surmounted by a domed tower, and will give access to the science and art class rooms. This portico will consist of four Ionic columns, 30 feet in height, and 3½ feet in diameter, supporting a covered tympanum,

the whole being surmounted by a stone dome. In addition to the requirements of a higher class school, the new buildings will provide for a science and art department for technical teaching, and for a gymnasium, the entire cost being £13,000.

At the sessional gathering of the United Club a discussion was initiated by Mr. Wrightson, M.P., on "State-aided Purchase of Working-men's Dwellings." He said that the measure which he had introduced to the House of Commons was one which, he believed, would be of the greatest service to the community at large. The only way to help the working man, in his opinion, would be by favourable loans from municipalities or from the State at such a rate of interest as would not tend to the prejudice of those lending the money. He claimed that this principle was essentially a Conservative principle, nor could he see any reason why it should not be appreciable to the English artisan as well as to the Irish or Scotch artisan. He believed that there was a genuine desire on the part of the English artisan to become the owner of his own dwelling, and it should be the duty of the State, or of the local authority acting through the State, to advance the money to enable the purchase to be made. The hon. member went on to explain the advantage which would accrue under his scheme to the working man, who, he said, taking his present rent at about £14 a year, would save at the least £6 annually, to say nothing of the fact that at the end of thirty years he would become the owner of his own house. Then, again, the working man, by this scheme, made provision for his old age; he became a more substantial member of the community. Such a measure would do more to put an end to the Socialistic nonsense talked in the present day than any legislation could do.

BEFORE the Select Committee of the House of Commons, presided over by Mr. Roby, Mr. Balfour Browne, Q.C., the leading counsel for the Great Northern Railway Company's omnibus bill, which seeks among other things to acquire property for making a new goods station at Manchester, said he was glad to say that, since the adjournment from the previous day, the Company had come to an arrangement with the Manchester School Board. At present the matter was in an inchoate state, but the substance of the bargain was that the Company agreed to purchase the School Board premises for a lump sum of £50,000. They also agreed—and this was generosity—to give them the costs of the opposition.

WORKMEN engaged in the demolition of China Lane, Lancaster, one of the oldest streets in the town, formerly the principal road from south to north, have made several interesting "finds." A quantity of copper coins, dating as far back as 1644, together with others of 1734, and those in vogue during the reign of George III. and George IV., have been discovered in the cellar excavations, and also under many of the floors. A couple of wells—one 30 feet deep—have been opened up, in one of which there is four feet of good water. Attached to it is a suction pipe, which had evidently at one time been used for bringing the water into a kitchen. Some enormous stones have also been unearthed, including one or two eight feet long by five feet wide, which have evidently been used as coverings for vaults. In the street, are some old-time houses, once the abode of the West India merchant princes of the town, and at the end is a building that contains the shield and arms of the Earl of Derby. It is proposed to place the coins and other antiquarian relics in the museum in the Lancaster Storey Institute.

THE development of traffic on the Manchester Ship Canal, and its increasing importance as an agent of trade, give interest to a smaller but similar project in the adjoining county. Sheffield, like Manchester, has been eagerly seeking an adequate waterway to the sea, and now, through the enterprise of South Yorkshire capitalists and the assistance of the Manchester, Sheffield, and Lincolnshire Railway Company, she will probably get it. No English city has been so crippled in its trade by heavy railway rates. Some years ago one firm removed the whole of their steel rail-making plant to Workington, and still manufacture on the seaboard to escape the cost of land transit. The Sheffield market for ship plates has also dwindled because of the difficulty of competing with makers nearer the coast. The city maintains its reputation for the production of armour plates, but the carriage rates and charges for this bulky and heavy material are enormous. Considerable ingenuity is, moreover, required safely to convey these huge plates to port. Only two years since, the up and down lines of one of the railways running from Sheffield to Hull were entirely cleared of traffic on the Sunday so that a portion of the armour and the anchor of a Russian man-of-war might be sent through for shipment. The inconvenience, expense, and trouble of reloading will be avoided by carriage along the canal, or rather, series of canals, which the Sheffield and South Yorkshire Navigation Company have bought and



SKETCH OF STABLES: BY BANISTER FLETCHER.

intend to prepare for systematic traffic from Sheffield to Goole. It is doubtful whether the North German Lloyd steamers will ever penetrate to the canal basin, near the Sheffield Corn Exchange; but though the South Yorkshire waterway will probably never bear such large ships as may be seen at the Salford quays, or passing through the Eastham locks, a great expansion of business is anticipated.

THE canal stretches from Sheffield to Tinsley, there joins the River Don Navigation, and runs through Rotherham, Mexborough, and Doncaster. At Stainforth it merges into the Keadby Canal, and a lock opens the way to the River Trent. By the Dove and Dearne Canal communication is possible with Barnsley, and it is also intended, by the construction of a new canal from Brainwith lock to Sykehouse Bridge, to enter the Aire and Calder Canal. The company will have nearly sixty miles of waterway under its control, and though it only styles itself a barge canal undertaking, it proposes to make a big lock and basin at Keadby for the admission of vessels as well as barges, and may ultimately deepen and widen the canal or canals, to allow the passage of boats of light draught into the basin in the heart of Sheffield. Meanwhile the various navigations have been formally handed over to the company, and directors appointed to do all in their power to improve the waterway and foster trade on it.

UNKEMPT would seem to be a legitimate criticism of the condition of Westminster Abbey Churchyard, more particularly that part of the ground which is situated between the east end of the building and the passage or street leading to Poets' Corner. There appears to be not a single blade of living grass, it is dead and drab, and a *Times* correspondent saw, the other day, in this small space quantities of paper of all description and colour, orange peel, straw, fibre from matting, dead leaves, glass and stone bottles, four matchboxes, several omnibus or tram tickets, four old milk or meat tins, a wooden bat, two pieces of linoleum, a large coil of iron, a red rag, and other unsavory rubbish, while in the niche of the venerable buttress nearest to the entrance in Poets' Corner was a large heap of pieces of paper intermingled with feathers and pots! This is a serious indictment. Surely Poets' Corner even *externally* should be sacred.

PROFESSOR CHURCH has reported to the First Commissioner of Works on the condition of the frescoes in the Palace of Westminster. His operations have been confined to cleansing the frescoes and to some slight treatment of defects, and he will further report after a time how the paintings have been affected by the processes he has employed. The deterioration of the paintings in the Royal Gallery is attributed to the frequent deposition of moisture on their surface which carries suspended soot, dirt, and dissolved sulphuric acid. In the Peers' Robing Room the surface of the picture of "Daniel" has been washed with distilled water, and the surface gone over with cotton-wool moistened with pale drying linseed oil, free from lead. The result has been a decided improvement in colours and general effect. The report is fairly hopeful, but the examination was urgently needed. The maintenance of a uniform temperature is recommended. The frescoes in the Upper Waiting Hall are in a deplorable condition, and there is not enough left of them to admit of their being restored.

MR. DARLING, M.P., has introduced a Bill into the House of Commons for the separation of St. Paul's, Deptford, from the Greenwich Board of Works. This is a proposal which would decidedly improve local government in the district. The large parish of St. Paul's, Deptford, with its population of over 90,000, has never been able to work smoothly with the parish of Greenwich, which has a population of about 40,000. The two districts differ in character and sentiment. But Greenwich is jealous of Deptford, and its member, Mr. Boord, has blocked the Bill. The small Vestry of St. Nicholas, which represents only 4,000 people, has joined, with the result that Deptford Vestry has become discouraged and has withdrawn the proposal. St. Paul's, Deptford, however, which has a population of about double the two districts from which it desires to separate, will lose this opportunity of enjoying local government. The only chance for the district now is to return a sufficient number of members to the Board of Works who would be in favour of the separation; but this is a process which will take some years to accomplish.

THE Corporation of the City of London have sanctioned an expenditure of £41,500, for the construction of cooling and chilling chambers at the Foreign Cattle Market at Deptford.

THE plans of the new Town Hall, Rotherhithe, have been on view for six days in the public library, and the exhibition was visited by 2,200 persons. The new mortuary is to be commenced immediately, and application has been made to the St. Olave's Guardians for the temporary use of the mortuary at the infirmary during the demolition of the existing and building of the new one.

The Builders' Journal COMPETITIONS.

FIRST ASSESSOR.

We have pleasure in announcing that

MR. ASTON WEBB, F.R.I.B.A.,

has kindly consented to act as Assessor to the first of our series of competitions. Mr. Webb has stipulated that the whole of the drawings should be submitted to him, as he holds that "it cannot be satisfactory either to an assessor or the competitors for him to place a design *First* when he has not seen all the drawings."

The whole of the competitive designs will, therefore, be laid before Mr. Aston Webb, and his award will be published in these columns in due course.

For the benefit of those Architectural Students who may not have seen our previous announcement, we repeat the substance of it, making an alteration in the form of application for our own convenience.

The proprietors of THE BUILDERS' JOURNAL will advertise each month for Competitive Drawings from students and others under 25 years of age, and will advertise the details of the competitions.

Intending Competitors must send their names and addresses on a post-card, to the Editor, announcing their intention of competing. The drawings must be delivered under *Nom de plume* to the Editor, who will submit them to an independent assessor in the person of some well known practising architect, who will make his award. Certificates, signed by the assessor, will be presented to the authors of the three premiated designs and a cheque for half-a-guinea forwarded to them to defray their out of pocket expenses. At the end of the session the thirty-six premiated designs will again be submitted to a body of experts—preferably a committee formed from the twelve monthly assessors—and upon their report a valuable

Gold Medal and a Cheque for £10 10s.

will be presented to the fortunate student who has, in their opinion, done the best aggregate work. The author of the best set of drawings submitted in any single competition will be awarded a Silver Medal and a Cheque for £3 3s. A public exhibition of the premiated designs will be held. The result of the monthly awards will be announced in our columns and the assessors' reports will be published in full. The drawings will remain the property of their authors, but we shall reserve the right to publish any we think fit.

The Second Competition.

The Proprietors of the BUILDERS' JOURNAL invite drawings, in competition, from those under twenty-five years of age, for a Village Club House, on a corner site, 150 feet by 40 feet. The Club to contain a general room with a dais for the villagers, a reading room and library, a bowling alley, service bar, tea room, committee room, housekeeper's apartments, and three cubicles for public use. The necessary outbuildings must be provided. Cost not to exceed £2,000. Drawings to be delivered at Talbot House, Arundel Street, Strand, not later than Monday, the 29th April, 1895.

MUNICIPAL electric lighting in Brighton has been very successful. The income on last year's working was £16,374, which, after deducting working expenses, and £5,000 for interest and repayment of loans, showed a net profit of over £5,000.

The Builders' Journal.

MEN WHO BUILD.

No. 7.

PROFESSOR BANISTER FLETCHER,
J.P., D.L.



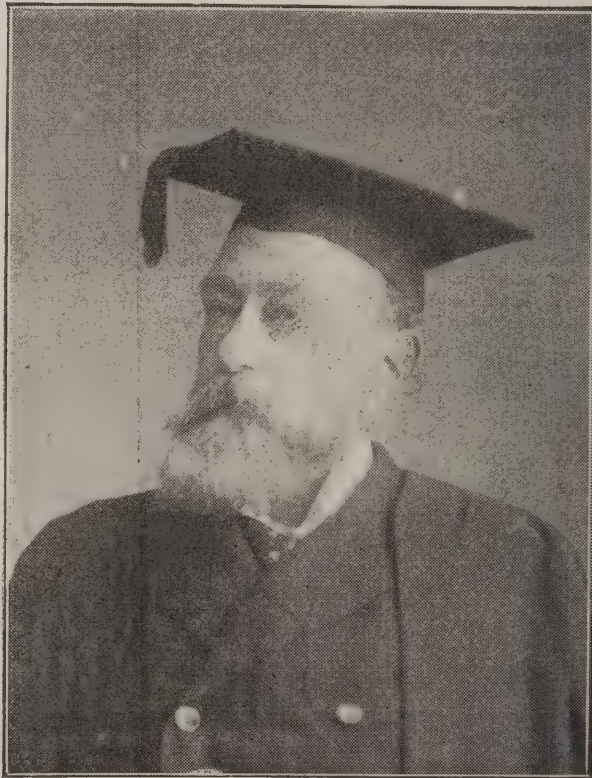
If you were asked—invidiously—to point out that all-round man, who being thoroughly conversant with the modern

practice of architecture, had yet a pretty turn for the fitness of things in design, who knew a thing or two about those perplexing "light and air" subjects, and those heart-breaking "party structures," who could write a voluminous book upon the London Building Acts, and yet foster a soul-inspiring adoration for delicious carvings, who has thrashed out the details of model houses for the industrial classes, who "chairs" the Sanitary Committee of the City of London, and can deliver a delightful lecture on the intricacies of modern plumbing, or ancient Greek art, there is no one you could name but Professor Banister Fletcher, who, amongst a hundred other duties, has again accepted the presidency of the International Building Trades' Exhibition now open in London.

There are men, even in architecture, who thrive on hard work, who delight to get to their desks before the office boy has condescended to dust it, and to remain at it long after the toilers of the busy world have departed for the night. Banister Fletcher was reared under such conditions.

He had the audacity to begin practice when he was twenty, and, as if to prove the value of audacity, Fate has never taken the trouble to punish him for it. Charles James

Richardson, a writer of architectural books, which have survived his architectural reputation, was Fletcher's first master, and he induced his pupil before he settled down to the drawing board, to master all the details of plumbing, carpentering, painting, and general practical building work. He can, therefore, to this day dress a door and wedge up mortices—one of the most difficult simplicities of joinery—build up a brick wall, and wipe a plumber's joint, and he may take it as unction to his name that there are not six other architects in England who can rival him. Upon this part of an architect's training, the Professor feels strongly, and is convinced that the more one studies these theoretical matters during his ordinary



training, the better able will he be to cope with the extraordinary difficulties which arise in general work; difficulties which overwhelm one unless they can be met by



Ground Plan

First Floor Plan



Villa at Hendon

A VILLA AT HENDON: PROFESSOR BANISTER FLETCHER, ARCHITECT.

THE BUILDERS' JOURNAL.

THE INTERNATIONAL BUILDING TRADES' EXHIBITION. SUPPLEMENT.

Published with
Vol. I., No. 7.]

TUESDAY, MARCH 26th, 1895.

[Gratis.]

NOTICE.

Up to the evening of Saturday, the stands of most of the exhibitors at the Building Trades' Exhibition were in a state of chaos, and quite unfit to be dealt with by an independent and conscientious critic. We do not intend to criticise or notice goods before we are able to personally examine them, and therefore, although at a great pecuniary loss to ourselves, we determine to issue a supplement dealing with the few completed exhibits in the present issue, and to continue our survey over a

SECOND SUPPLEMENT,

which will be included in our second Exhibition Number, of Tuesday, 2nd April; also bearing a first edition of

25,000 Copies.

Advertisers who have placed supplemental contracts with us which do not appear in this number will have their announcements in that issue, and exhibitors who have not yet supplied us with technical details of their goods on show, are requested to send them to us at Talbot House, Arundel Street, Strand; or to our office in the Exhibition, STAND 81 C.

Telephone 35,422.

OUR SURVEY.

A MID the shouts of railway carmen, the chattering of workmen, the rattling of pulley blocks and chains, the clinking of the bricklayers' trowel, and the thunderings of a hundred carpenters busily at work, the "International" Building Trades' Exhibition of 1895 bids fair to be the very best of the series hitherto held, and to possess many novel exhibits of an interesting character. The mere novelty in building materials is a thing to be severely avoided, and we shall have to notice many avoidable manufactures before we are finished. What perhaps is the most striking feature of the Exhibition is the wonderful advance potters, tile workers, and sanitary specialists seem to be making hourly in their manufactures. Unfortunately, at the latest moment these lines could be written, not a single clay worker had his stall completed, and as this section—perhaps out of compliment to the organiser of the Exhibition, Mr. Greville Montgomery, the well-known Proprietor of the *British Clay Worker*—is the most interesting of any in

the Hall, we shall have to defer a detailed survey of these exhibits until next week.

Messrs. Duckett & Son, of Burnley, Messrs. Stanley Bros., of Nuneaton, and Messrs. Gibbs, of Loughborough,

were the most advanced, and we might almost deal with their stalls here, but it would be better, in the face of the keen competition existing between producers of brick, tile, and earthenware goods, to deal with the section as a whole a little later. Visitors, however, will not fail to give very careful attention to Messrs. Duckett's exhibits, particularly good in latrine manufactures, or to the remarkably fine glazed bricks of Messrs. Stanley Bros.

The Albion Clay Company,

who occupy a fine position in the central portion of the Exhibition, were almost in a state of completion when our report left. Some of the most perfect drain pipes at present in use in England are the Paragon pipes, made by the Albion Clay Company. The chief feature of these pipes is that it is

"The Marriage of Ingenuity and Simplicity."

KAYE'S PATENT WEDGE LOCKS

— AND —

KAYE'S PATENT SAFETY CATCHES

**Are acknowledged to be the Finest and Most Ingenious Specimens of Lockmaking in existence.
A Perfect Revolution in the Locksmith's art.**

KAYE & SONS make Patent Locks, Bolts, Latches, and Handles for every kind of Door, Desk, Drawer, Fanlight, Window, Cupboard, &c., including Railway Carriage and Brougham Locks, Cart and Railway Wagon Doors, all of which have great advantages over all others. Also Patent Exit Fittings for doors that open outwards and for doors that open both ways, which were invented to meet the wants of the London County Council.

Prices and Particulars on application to

JOSEPH KAYE & SONS, Ltd.,

93, High Holborn, London, W.C.; & Kaye's Patent Lock Works, Hunslet, Leeds.

impossible, either by imperfect laying or subsequent ramming down of trenches, to possess a faulty invert. The inner core of the rim or socket is made eccentric to the barrel of the pipe itself by thickening the bottom section so that the next pipe inserted possesses a true barrel with its preceding fellow without any packing underneath being necessary to raise it into position. This naturally prevents the one great defect of imperfect drainage there being a perfect bore in the Paragon; from end to end of a drain, allowing no accumulations of sewage matter at the joints, and permitting the flushings to perform their proper duty, and thoroughly cleanse the system. The "granitic stonewares" from which these pipes, and indeed, all the manufactures of the Albion Clay Company are made, is remarkably hard and of a fine appearance. The clays appear to be blended to insure, so Mr. Knowles tells us, a dense, impervious and imperishable body, and have been tested by Kircaldy to the highest possible crushing and bursting pressures. This firm makes, and has on show, all the sanitary

Inventions of Mr. Sykes,

who will be remembered as having once held a high official position in the engineering interest of Fulham. Mr. Sykes' Sewer-Gas Interceptor, which will be found thoroughly explained and illustrated on pages 4 and 5 of the supplement, contains many striking improvements of every interceptor previously known. We understand that the price has been brought down to successfully compete with the cheap and oftentimes imperfect interceptors which foolish people will still insist upon using. The Patent Channel Bends for Inspection Chambers, invented by Messrs. Jones & Sykes, to prevent the terrible dangers of "splashing," which in Sanitary Science is recognised as one of the first things to be avoided, are

shown in position on the stand, and are also detailed and explained fully on page 5. The Albion Clay Company are known to possess the finest clay "fields" in the South of England. They have magnificent works near Burton, with machinery able to turn out the largest pipes and pieces of clay-ware to be found in the market, and the quality of these goods is beyond reproach.

Messrs. John Line & Son,

of Reading and London, have an "artistic" pavilion in which to show their Wall Papers. They have several excellent designs by A. Silver, Owen Davis, "Jonquet" and A. Wilcock, well worth inspection. This firm appears to be agents for many decorative materials, Stained Glass, "Alabastine" and "Duresco," Petrifying Liquids, Varnishes and the like.

One of the least pretentious stands in the whole Exhibition, is that occupied by

Joseph Kaye & Sons, Ltd.,

demonstrating the uses of their remarkable series of locks which are no longer entirely of the "push and pull" principle. We have previously referred to the K's locks in the columns of this journal, but the more we see of them, the more the simplicity and ingenuity of the marvellous little bits of mechanism are explained to us, the more we wonder that they are not in absolute universal use. It is remarkable how difficult it is to upset any fossilized system connected with such ancient pieces of mechanism as locks, but our surmises are utterly wrong if the Kaye system does not eventually wipe the old imperfect method off the earth. One need go no farther than the Kaye railway lock, nearly 30,000 of which are in use on the Great Northern, and which is to be placed on the carriages of the London and South-

Western, and several other metropolitan companies. A working model is on view, also one of the brougham locks, which are as simple and as perfect as it is possible to make them. Cupboard locks innumerable are shown of the most approved action, and the lock used for folding doors has something quite uncanny in its remarkable simplicity. The "Panic" fastening is the most perfectly adjusted fastening we have seen, and a simple little catch for fastening the tail boards of dog-carts or builders' heavy carts caused us to laugh in absolute wonder at its ridiculous simplicity. Who does not know the linchpin method of fastening every tailboard and horse-box and cattle truck from Cairo to Chicago? Mr. Kaye, like the other millions of inventors, saw the same thing, but he went home and altered the whole senseless system in a moment. A simple turn of the forefinger will open his tailboard fastening, even in face of a pressure of twenty tons, and yet the twenty tons multiplied by twenty could not force the bolt otherwise than by smashing it to pieces. The man who knows not Kaye's locks is to be pitied; he that knows and does not use them is to be pitied more. They are the most perfectly devised fastenings we have ever seen.

The stand of the

Self-Lock Roofing Tile Company,

of whose goods we know very little, was a mere mass of quartering towering above anything else in the Hall, but which seems worthy of some critical attention. At the moment, we are not altogether pleased with the angular presentation of these tiles, and we should imagine that unless something remarkable in the way of price, or in the manner of fixing is found in this system, that the Company will have a task to make their goods acceptable to architects.

REVOLUTION

IN THE MANUFACTURE OF

Glazed Bricks, Tiles and Wall Decorations.

The Old Glaze superseded by a Superior and Cheaper Article.

THE new Patent Material known as "**OPALITE**" is manufactured from the finest Opal and is prepared in most colours and tints, for Plain and Fancy Wall Decorations.

The beautiful artistic effect produced by the application and manipulation of "**OPALITE**" to the Walls of Public Buildings, Hotels, Restaurants, Banks, Offices, Corridors, Staircases, Private and Public Houses, Baths, Lavatories, &c., is of a practical and high class character, as the "**OPALITE**" does not craze nor wear out like ordinary glaze, and therefore needs no renewing.

The combination of colours and tints, when fixed on the wall, blend and sparkle in a most brilliant and pleasing manner, and produce an effect hitherto unattained with any other Wall Decoration.

Orders can now be promptly executed, and Architects' designs carried out with scrupulous care and despatch by competent Assistants.

OFFICES AND SHOW ROOMS:

The National Opalite Glazed Brick & Tile Syndicate, Limited,
142, CHARING CROSS ROAD (near Oxford St.), LONDON, W.,

AND

26, PALL MALL, MANCHESTER.

Telegraphic Address:—"OPALITE, LONDON."

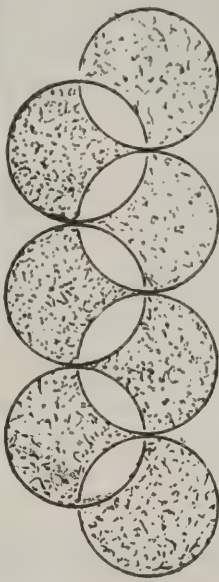
One of the very few striking novelties in the Exhibition is shown at Stand 172, an exhibit which does not, in our opinion, show the novelty to the best advantage, and which is lacking in a judicious selection of colouring, which would greatly have enhanced a method of glazing which has very many things to recommend it. The National

Opalite and Glazed Brick and Tile Syndicate, Limited,

of 142, Charing Cross road, and Manchester, are the makers of a new material which they call "Opalite," and which they say is manufactured from the finest opal. The material is made in very thin tablets of any size and of any colour, and as it possesses a surface of remarkable brilliancy it offers itself to a wide use in every way glazed bricks or tiles are adapted. It can either be attached to bricks by means of a compound cement specially made for the purpose by the Company, or an ordinary wall can be covered with it in the same way as tiles would be used, with the difference that it adds but the slightest extra weight to such a wall; it occupies in thickness but the fractional part of an inch, and it shows a brick joint. Where borrowed light is a necessity it appears to us that Opalite would answer much better than any glazed brick or tile at present in use. In price it is cheaper than tiling, and it should undoubtedly have a large field of usefulness in lining corridors, bath rooms, dairies, larders, lavatories and kindred domestic offices, bakehouses, cafés and confectioners shops. And there are thousands of wretched areas and back elevations in the City of London alone that would be greatly improved by an early and intimate relationship with the new material. It stands intense heat, intense cold, and extremely rough usage, and it can be made in any tint from pure and inoffensive white to the most alarming colours it is possible to imagine.

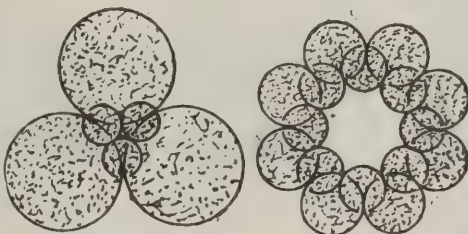
One of the greatest novelties in the Exhibition is

Pease's Tubular Construction,



shown by Messrs. Ashmore, Benson, Pease & Co., Ltd., manufacturers, Stockton-on-Tees. In this system sheets of metal of almost any size and reasonable thickness, are rolled into tubes, and without the longitudinal joint being completed, are interlocked with other tubes and the interstices filled with concrete, which, when perfectly hard, forms a most remarkable combination of metal and concrete, possessing great compactness and strength. The Patentee was good enough to show us the various uses to which his system may be put.

He can manufacture a thin partition wall of only two inches in thickness, which will with-



stand four times the pressure of any partition

constructed of any ordinary materials. He can provide air spaces through that partition. It shall be fireproof and comparatively sound proof, and it is as cheap. The columns exhibited in the stall are quite pleasing to the eye, and cross sections of them show but a series of pretty circles interlaced one in the other. Columns may be tapered and when filled in solid with concrete will bear enormous weights. Tubular Flooring is also easy of construction, and should be remarkably cheap.

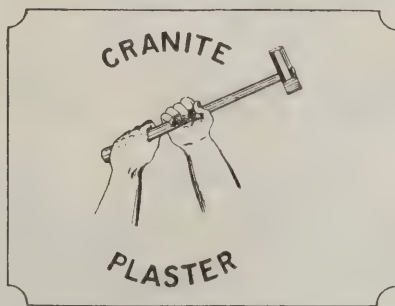
In a pretty little hut near the Band Stand the

Granite Silicon Plaster Company

show the Granite Plaster in the various phases of its usefulness; it is applied in different panels on the ordinary lathing, and several of the many new and piping hot metallic inventions which supersede the poor old lath. There is the honest wire-netting and the idiotically termed Jhilmill, a term more adapted for the name of some quack corn-lover than a serious building material, made by such a firm as Heywood Bros. & Eckstein. However, we were notified of this exhibit, and our representative gave special attention while the plasterers were at work, and we are of the firm opinion that what the proprietors claim for this substitute for lime and hair plaster is perfectly just and warranted. Within twenty-four hours of the application of Granite Plaster "it becomes dry, hard, dense and metallic, with great elasticity." All this is proved to our satisfaction with the exception of the elasticity of the material, and that we have had no power of testing; but we shall do so, and if we find that it has elasticity, as we have no doubt it may have, then one of the greatest objections to the ordinary "plaster" is removed. The proprietors claim also that it will bear rough treatment without denting, chipping or

GRANITE PLASTER

You can render and float in one coat and set same day.



You can paint or paper within a few days from finishing.

It is intended to displace ordinary lime plaster, and the price has been brought down so as to give to the Trade a first-class material, with all its advantages, at about the same cost.

WE CLAIM, BRIEFLY, THE FOLLOWING ADVANTAGES:—

- It is fireproof, and a perfect non-conductor.**
- It presents, when finished, a smooth surface as hard as stone.**
- It is extremely simple to prepare and easy to apply.**
- It is the best thing for quick repairs.**
- It has no rival positively as a structural material.**

Our Pamphlet, containing all particulars, will be sent free on application to the

GRANITE SILICON PLASTER COMPANY,

Telegrams:
"Sweetwater, London."

36, King's Road, St. Pancras, LONDON, N.W.

Chicago Exhibition.Highest Awards.

ALBION CLAY COMPANY, Limited,

SOLE MANUFACTURERS of the  "GRANITIC STONEWARE" Pipes.

TRADE MARK.

All the "**Granitic Stoneware**" Pipes are made from "**Stoneware**" Clays, of which we are the Sole Proprietors. The Clays are carefully selected and blended to insure a hard, dense, **impervious and imperishable** body, specially adapted for **Sanitary** Purposes. The Pipes have a "**toughness**" as opposed to "**brittleness**," which is not possessed by any other Stoneware Pipes. They have been proved to withstand the highest crushing and bursting pressures under tests by Kirkaldy and other authorities at home and abroad. They are made by the most improved Patent Machinery and are highly approved for their uniform superior quality. All the Pipes are stamped with the Trade Mark, "**Granitic Stoneware**," as above.

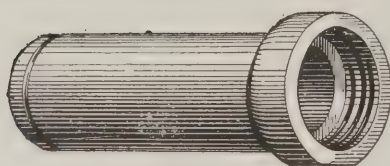
TESTED PIPES.—Selected and Tested under Hydraulic Pressure and Marked.

All Sizes from 6 in. to 24 in. diameter of full Standard thickness and of any length up to 3 ft. for 6 in. and upwards.

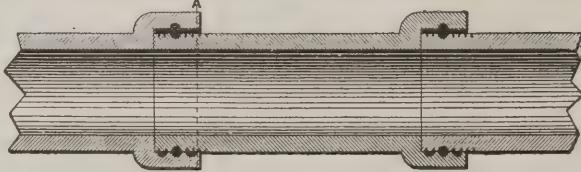


PATENT PARAGON PIPES.

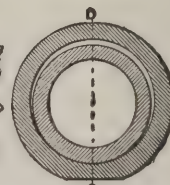
PATENT PARAGON PIPE. C FORM.



PERSPECTIVE VIEW



LONGITUDINAL SECTION THROUGH C.D.

SECTION THROUGH
A.B.

Sound Portland Cement Joints to stand any test. True alignment of the Invert and Firm Rest. No obstructive ledges at Invert as with ordinary Socket Pipes. Free Flow. No Stoppage. Full Capacity of Sewers and Drains maintained.

CHEAPEST IN FIRST COST AND MAINTENANCE.

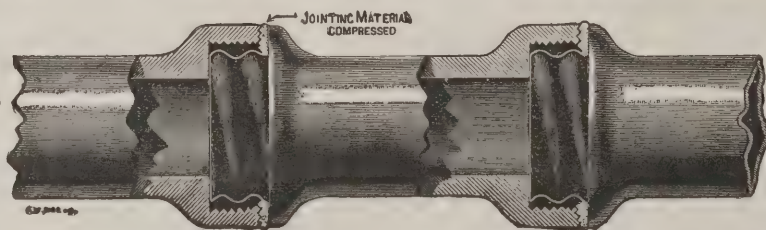
The **Patent Paragon Pipes** are superseding the **Ordinary Socket Pipes**. They are being specified for important Sewerage and Drainage Work in all parts for Government, Corporations and Sanitary Authorities. They have been used for the new Drainage of Smedley's Hydropathic Establishment, Matlock, Derbyshire, and the Royal Opera House, Covent Garden, London, &c.

To meet the requirements of **Sewerage** and **Drainage** according to circumstances the **Patent Paragon Pipes** are made in three forms:—(A) With ordinary depth of Socket for Surface Water Drains, &c. (B) With **deep** Sockets for **Sewers** and **House Drainage** and (C) With **extra deep** Sockets for the Best Class of Work.

When **specifying** the Name should always be given in full as **Patent Paragon Pipes A, B, C**, according to the kind required.

SYKES' PATENT JOINT PIPES.

THE MOST RELIABLE
PIPES FOR MAIN SEWERS
IN WATER-LOGGED
GROUND.



WATERTIGHT JOINTS
MADE WITH THESE
PIPES WHEN ENTIRELY
SUBMERGED.

The Screw Joint ensures true alignment of the Pipes. The **Patent Jointing Material** is **impervious** and **imperishable**. It sets slowly and yields for a time to any settlement of the Pipes in bad ground. It cannot enter the Pipes and cause obstruction therein, as in grouting. Sykes' Patent Joint Pipes have made watertight Joints in water-logged ground where other Patent Joints have failed. Easily laid by Ordinary Pipe layers. Bends and Junctions easily inserted.

Moderate in Cost, Easy to Lay, and the most Reliable of any for Bad Waterlogged Ground.

SYKES' PATENT SEWER GAS INTERCEPTOR. The most **EFFECTIVE** for the **PRESERVATION** of **HEALTH**.

JONES & SYKES' PATENT CHANNEL BENDS FOR **MANHOLES** AND **INSPECTION CHAMBERS**.

SANKEY'S PATENT DEEP INTERCEPTING GULLY, with Galvanised Bucket.

KEITH'S PATENT DRAIN TESTING AND FLUSHING APPLIANCES.

SYPHONS, GULLIES, INTERCEPTORS, &c., with **PATENT PARAGON SOCKETS**, to avoid check to flush in forcing Solids through the Trap.

INVERT, JUNCTION, AND GULLY BLOCKS. **STREET GULLIES** to any Size. **LATRINES, CLOSETS, SINKS, &c.**

Works: **WOODVILLE, BURTON-ON-TRENT.** | Chief London Office: **18, NEW BRIDGE ST., E.C.**

LONDON DEPOT: MIDLAND RAILWAY (Somers Town Goods Station), Ossulton St., EUSTON RD., N.W.

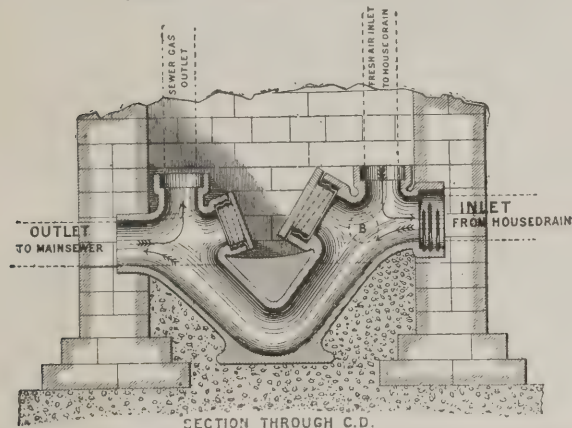
ALBION CLAY COMPANY, Limited,

Albion Works, Woodville, Burton-on-Trent.

SYKES' PATENT SEWER GAS INTERCEPTOR.

The most Important and Efficient Invention for the Protection of Public Health. Made with the PATENT PARAGON SOCKETS and with SYKES' PATENT SCREW STOPPERS.

SYKES' PATENT INTERCEPTOR.



NOTE.—If the sewer gas outlet is not used, a screw plug can be inserted and closed with an indiarubber washer or with grease.

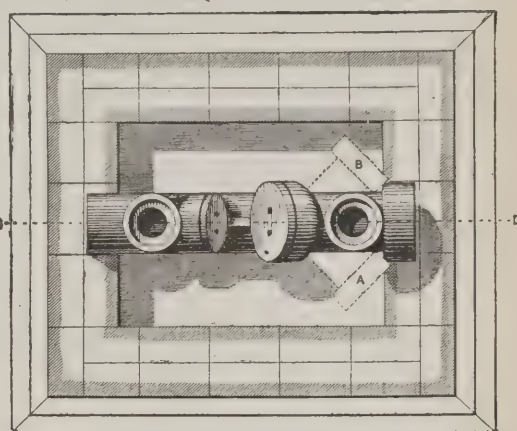
PRICES.

Delivered to any part
of the
United Kingdom.

4-INCH. 6-INCH.
16/6 ea. 22/6 ea.

9-INCH.
38/6 ea.

Side Inlets, 2/- each extra



PLAN

NOTE.—The Interceptor can be obtained without the inlets A or B, or with one or both of them.

IMPROVEMENTS.

Prevents the admission of sewer gas to house drain.
Provision for ventilating Public Sewers (which may or may not be used).
Pressure of gas on the sewer side being taken off by the Ventilator, the water seal cannot be forced.
The Interceptor being sealed prevents the escape of gas into the Chamber.
Provision for the admission of fresh air to the house drains.

The Patent Screw Stoppers in inspection inlets cannot be forced out, but can be removed at convenience for cleansing the sewer or drain if required, and for testing the drains.

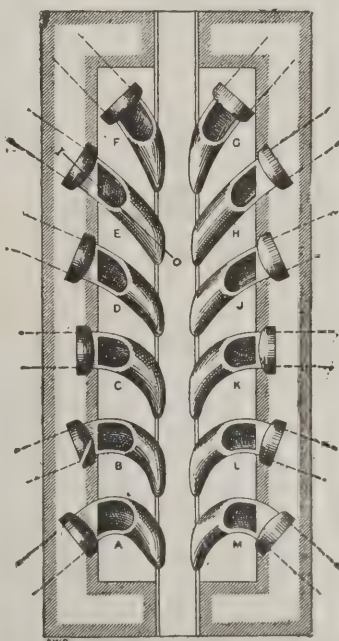
By confining the sewage to the Interceptor it cannot escape to permeate the sub-soil or brickwork of the manhole.

The concentration of all parts in the Chamber, where they are easily accessible, gives full control over the System.

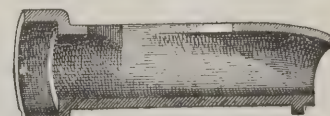
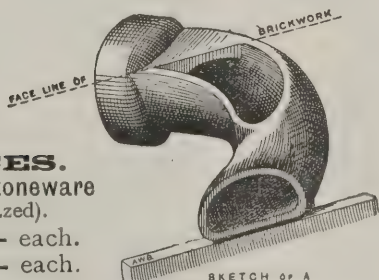
JONES & SYKES' PATENT CHANNEL BENDS.

FOR INSPECTION CHAMBERS.

These Improved Bends have been designed to prevent the splashing which at present occurs in the Chambers, and also to better direct the course of the sewage to the Main Channel. Sewage discharged through imperfect channels is deposited on the benchings and walls of the Chamber, where it decomposes and generates foul gases. The Improved Bends are bridged across the outlet half, and slightly curved over from the top, which forces the sewage downwards and prevents splashing.



The outer wall is also curved towards the inner wall of the outlet, thus discharging the sewage in the direction of the main channel, and the slight ledge extending in an inclined direction at the outlet end of the bend, breaks the force of the sewage and directs it towards the outlet of the main channel. A portion next the collar or socket is also bridged over and cut off at an angle, so as to conform better with the brickwork of the chamber, thus avoiding all cutting and unsightly rendering with cement.



PRICES.

PRICES.
Granitic Stoneware
(Salt Glazed).
4-inch, 2/- each.
6-inch, 3/- each.

Cream Coloured—4-in., 2/3; 6-in., 3/3 each.
White Enamelled—4-in., 2/6; 6-in., 3/6 each.

Sankey's Patent Deep Intercepting Gully, with Galvanized Bucket. Keith's Patent Drain Testing and Flushing Appliances. Syphons, Gullies, Interceptors, &c., with Patent Paragon Sockets, to avoid any check to the flush in forcing solids through the Traps. Invert, Junction, and Gully Block; Street Gullies to any size. Latrines, Closets, Sinks, &c.

LONDON DEPOT—Midland Railway (Somers Town Goods Station), Ossulton Street, Euston Rd., St. Pancras.
CHIEF LONDON OFFICE—18, NEW BRIDGE STREET, BLACKFRIARS, E.C.

cracking; that its tenacity and adhesive power constitute support to walls and partitions, and that it presents a smooth surface when finished as hard as stone. Habitual users of the old lime and hair will be glad to hear that the price of Granite Plaster has been brought down to compete favourably with it. The address of the Company is 36, King's Road, St. Pancras.

The Simplex Window Fittings Company

have challenged our opinion upon their well-known system of sashing and framing, whereby all difficulty of cleaning is removed. We can but form one opinion from the model they forwarded for our inspection, and from the actual exhibit in the Agricultural Hall, that it is far ahead of any other contrivance of the kind and remarkably good at that. We always hold a little consultative council of our own over all models or specimens submitted to us for inspection, and each member of the staff critically surveys the exhibit and writes down what he considers are its virtues and its faults. It was discovered that whilst the Simplex had many good points, it had only one trifling defect, counteracted undoubtedly by the ease with which the windows are manipulated. At our offices and in our own house there are many casement windows opening outwards and the only possible (leaving the judicious out of the question) way to clean them is from ladders raised from the ground. What can the Simplex Window Fittings Company do for these.

A near neighbour is

W. E. Rendle & Co.,

who exhibit a modest model of their Invincible Glazing. We watched the workmen fix this up, cut the metal-work, attach it to the rafters, and glaze the roof, and since, we

have been wondering what the putty-makers will do presently. The system appears to us to be perfect.

We should like to have said something in this issue about

Messrs. Candy's

goods, but at present they do not exist. We must wait patiently for the completion of their exhibit, as also that of the

Expanded Metal Company, Ltd.,

which occupies the central pavilion, upon which a very heavy rent is paid. The operations at this stall have had the supervision of Mr. John French Golding—of Chicago—the beneficent gentleman who makes things hum over this side, and who has, up to date, consumed more cigars and made more dollars out of one of the most delightfully simple inventions it has ever been our lot to investigate, than any other man within a few miles of the Agricultural Hall. As this Stand is near our own Office, we have exercised a little curiosity to discover what all the coming and going and bustle means, but at 7 p.m. Saturday night, we are as far off the track as ever. Until our survey is completed, however, visitors will have no difficulty to become thoroughly interested in this exhibit, the proprietors of which have recently bought up the business of the British Metal Expansion Company, Ltd. We shall be much mistaken if "Expanded Metal," in all its applications, does not "lick" creation. But we are going to test it thoroughly before we finally pass such an opinion.

The Kauri Timber Company

have a modest little show of some beautiful New Zealand woods, and truly, it is difficult to obtain even pine so free from imperfections as the produce of this Company. They

appear to have no less than half-a-million acres of forest land, containing over two thousand million feet of standing timber, mostly of the Kauri (Dammara, Australia) species which—says their circular—is the monarch of New Zealand forests, and is recognised for general purposes as the most valuable timber in the world. For all purposes where pine is generally used in joinery, the Kauri can hold its own with anything. Its transverse and tensile strength may be gathered from the tables of comparison made by H. M.'s Timber Inspector to the Admiralty:—

TRANSVERSE STRENGTH
(Scantling, 2in. by 2in. by 8 1/4in.).

	Relative strength.	Breaking weight in lbs. per square inch.
Pitch Pine	1'109	262
Danzic Fir	1'087	219
KAURI.....	'892	204
Canada Spruce.....	'831	168
Canada Red Pine	'810	163
Russian Larch	'776	157
Riga Fir	'744	150
Canada Yellow Pine ...	'665	134

TENSILE STRENGTH
(Scantling, 2in. by 2in. by 3oin.).

	Relative strength.	Breaking weight in lbs. per square inch.
Pitch Pine	'616	4,666
KAURI.....	'600	4,543
Russian Larch	'555	4,203
Riga Fir	'535	4,051
Canada Spruce.....	'520	3,934
Danzic Fir	'427	3,231
Canada Red Pine	'357	2,705
Canada Yellow Pine ...	'267	2,027

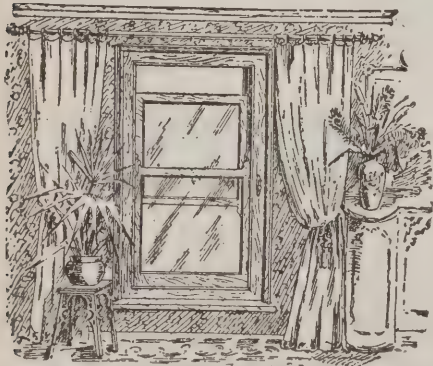
"It will be seen from the above," says the Inspector, "that Kauri is only excelled in transverse strength by the American pitch pine and Danzic fir—the former a timber not

GIBBS BROTHERS, Charnwood Works, LOUGHBOROUGH,
Manufacturers of Red and White Facing, and Moulded Bricks of every description, made from the well-known Leicestershire Clays. Hard, Durable and of Excellent Colour and Quality.
SUPERIOR SAND-FACED BRICKS FOR VILLAS AND COUNTRY HOUSES.

The attention of Architects is specially invited to our Exhibits on Stand No. 165, ROW F, at the Building Trades' Exhibition.

"SIMPLEX" PATENT

WINDOW SASH FITTINGS.



Securely Locked.—Showing Sash with Free Ventilation Top and Centre.

NO CORDS, WEIGHTS OR PULLIES,
BURGLAR-PROOF, SELF-LOCKING,
PERFECT SECURITY.

May be raised or lowered with the slightest pressure.
Ease and comfort. Perfect simplicity and safety of action.
Cannot get out of order. Both sides of the Window Panes
can be cleaned inside the room.

SIMPLEX PATENT.

LESS TIMBER. NO PULLEY BOXES.
GREAT SAVING OF LABOUR.
MUCH LESS COST THAN ORDINARY
FITTINGS.

WORKING MODELS AND ALL PARTICULARS
ON APPLICATION TO



Showing Sash turned into Room for Cleaning Purposes.

THE "SIMPLEX" WINDOW FITTINGS CO., Ltd.,
86, Caroline Street, BIRMINGHAM.

PRICE FOR SASHES AND FRAMES, FITTED WITH PATENT MOVEMENT COMPLETE, ON APPLICATION.

suitable for general building purposes; while the superiority of the Danzic fir is very slight, and it is decidedly inferior in tensile strength as well as in durability when exposed." It will, therefore, be seen that Kauri pine is specially adapted for wood pavement, and for that purpose alone an enormous future is in front of it.

A fine collection of ornamental wrought-iron gates and standards, railings, and fence-

ful survey of the exhibits, it strikes us that the prices are extremely low. For instance, a pair of gates entirely of wrought iron, and very commendable in design, 8 feet wide by 5 feet high, is, with best brass warded lock, sham, and hangings for stone piers, catalogued as low as £11, and on the cover of the said catalogue we notice the fascinating little sentence of "liberal trade discounts," so that Messrs. Hayward & Sons encourage a large business. Their goods will bear a very careful inspection.

ARCHITECTS AND THE BUILDING EXHIBITION.

A LITTLE DINNER AT THE CAFE ROYAL.

IF it be a good thing to have judges in a good humour, craft competitors at the Building Exhibition should not have much to fear. There was a little dinner of delicacy and reason at the Café Royal, on Saturday night, Professor Banister Fletcher being the host, and some thirty architects, members of the R.I.B.A., guests. A few associated with the Exhibition in an official capacity were included. The Café Royal lived up to its reputation, and so did several of the speakers, indeed, the after dinner oratory was of an inspiring order. The success of the Exhibition seemed to be in the air, and such comfortable cordiality gave the show a "send-off." Professor Banister Fletcher's little speech was bright

and interesting, and Mr. Greville Montgomery's "health," as the guest of the evening and the organiser of the Exhibition, was an important matter. Replying, Mr. Montgomery indicated that a sterling Exhibition had been his aim; he felt gratified by its industrial success; any financial gain had rightly, he thought, taken second place this year. Mr. T. Blashill, architect to the London County Council, proposed the Hon. Secretaries, and Messrs. Locke Worthington and H. P. Fletcher responded, the latter in an amusing speech on the duties of the Hon. Secs. Mr. Arnold Statham proposed the Judges, composed of twenty members of the Science Council R.I.B.A., and nominees of the different City companies. Mr. W. C. Street, Hon. Sec. to the Science Council, responded. Other toasts in which Messrs. Douglass Mathews, Searles-Wood, Ernest Benedict, and Prof. Unwin were implicated, closed the list. Messrs. Searles-Wood, Burrows, and Benedict sang songs. It was a pleasant little gathering. Next Monday (April 1st) the Judges will attend to adjudge the work of the competitions held the previous Saturday.

Our Survey will be extended to our Second Special Supplement of next week.

The Builders' Journal is published at 3 a.m. on Tuesday mornings, and should be obtained from any Newsagent in the Kingdom the same day.



GATE BLOCK.—REGISTERED NO. 250,937.

ings of all descriptions, is shown by

W. Hayward & Sons,

of Wolverhampton, in Bay 6, on the left-hand side of the Hall coming in from the main entrance, and from a catalogue which is forwarded to us, and a care-

lived up to its reputation, and so did several of the speakers, indeed, the after dinner oratory was of an inspiring order. The success of the Exhibition seemed to be in the air, and such comfortable cordiality gave the show a "send-off." Professor Banister Fletcher's little speech was bright

THE KAURI TIMBER COMPANY, LTD.

Head Office:—MELBOURNE.

KAURI TIMBER,

Among other purposes, is eminently suited for

Open Roofwork. Dadoing. Panelling. Mouldings. Doors. Floorings.
Lining. Church or School Seats and Fittings. Bedroom Furniture.
Railway Carriage Work. Deck Planking. Wood Paving Blocks.

KAURI PLANKS, &c., "K T C" BRAND, IN LONG LENGTHS AND EXTREME WIDTHS, CUT ENTIRELY CLEAR OF KNOTS, SAP OR HEART. ALSO HEWN AND SAWN LOGS.

Samples and Particulars from

E. C. BRITTAN, Agent, 27, LEADENHALL STREET, E.C.

PEASE'S Patent

TUBULAR SYSTEM

of Construction.

WALLS, FLOORS, COLUMNS, &c.,

Made of Interlocked Metal Sheetting filled with Concrete.

Immensely **STRONG, CHEAP & FIREPROOF.**

ASHMORE, BENSON, PEASE & CO., Ltd., STOCKTON-ON-TEES.

ELLIS, PARTRIDGE & CO.,

LEICESTER AND LONDON,

(Stand No. 7, Building Trades Exhibition),

Manufacturers of

“Redbank” Facings, Ornamental

Brickwork and Terra Cotta, also

“Woodville” Sand-Stock Facings.

Slate Merchants, Slating and Tiling Contractors, &c.

London Agency—Mr. T. FREEMAN,

200 and 202, Phoenix Street,

St. Pancras, N.W.

Telegrams—
“HAYWARD,” WOLVERHAMPTON.

ESTABLISHED 1860.

TELEPHONE
No. 7123.

WILLIAM HAYWARD & SONS,

MANUFACTURERS OF

Ornamental Wrought Iron ENTRANCE GATES	Strained and BARBED WIRE Fencing.	Wrought Iron Sheep and Cattle HURDLES.	Ornamental Wrought Iron PALISADINGS
WHEELBARROWS and Sack Trucks.	Wrought Iron ROOFING and General Smith's Work.	Unclimbable HURDLES and Railways.	Tree Guards and Game Proof Hurdles.

Illustrated and Priced Catalogue Post Free. SPECIAL LOW Quotations for Large Quantities.

BRUNSWICK WORKS, BILSTON ROAD,
WOLVERHAMPTON.

instant decision, in which there is no element of doubt or uncertainty.

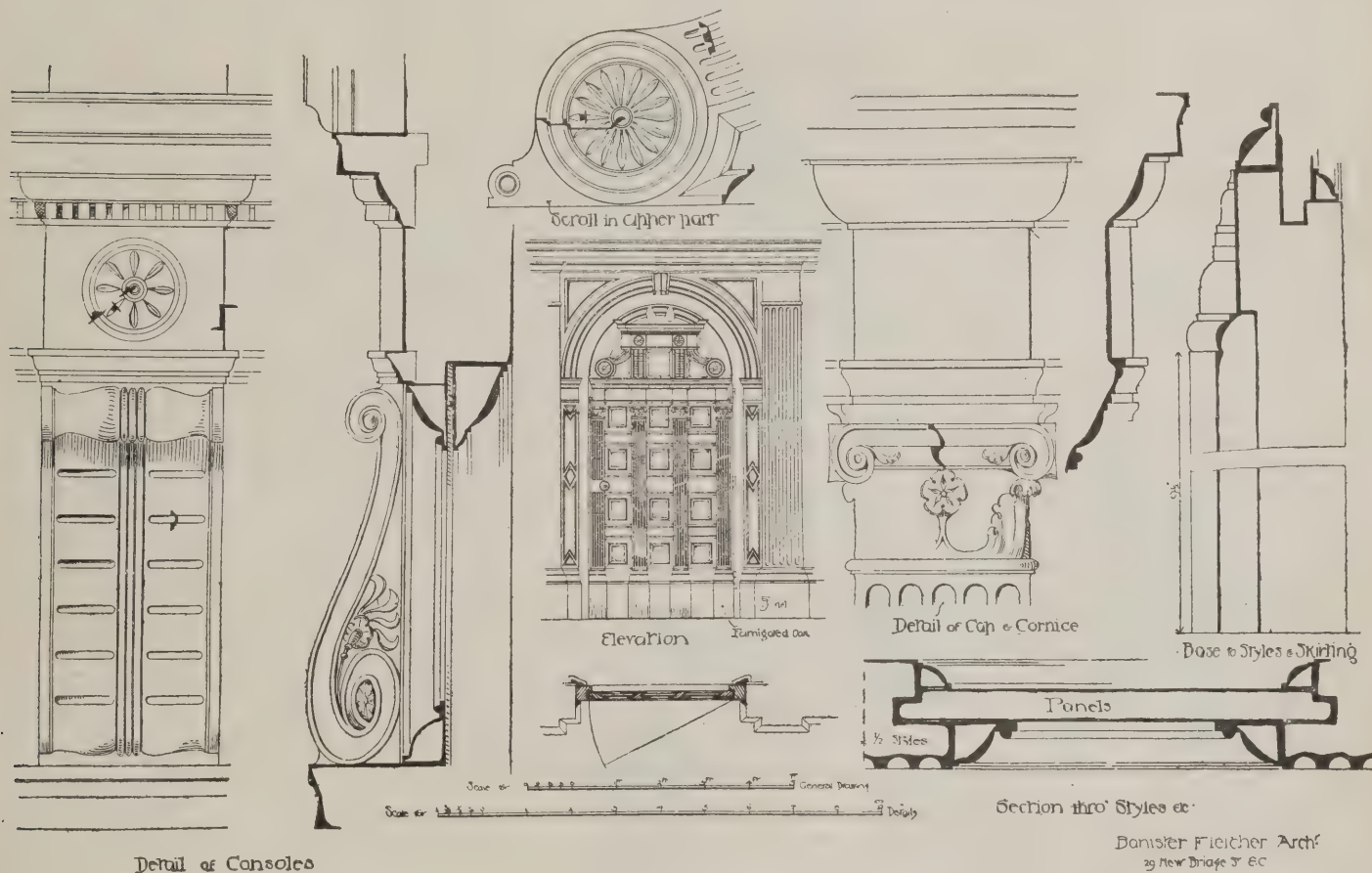
Himself a "Tyke," Banister Fletcher commenced work in Newcastle, but the magnetism of London drew him south, years ago. Amongst many works, illustrations of which embellish the walls of his delightful room in New Bridge Street, and overflow into the corridors and offices adjoining, are a score or more of suburban residences in Hampstead, Hendon, Clapham and Epsom; chapels at Wood Green, Bromley and elsewhere; the Jamaica and Circus cafés; factories at Clapham, Newington, Lower Thames Street, and Garlick Hill; schools at Finchley, model dwellings at Peckham and Pentonville, a gymnasium at Lambeth, residential flats and shops in Oxford Street, and the Headquarters of the Tower Hamlets Rifles. The Professor has also laid out large Metropolitan estates at Hanwell, Kennington, Hampstead and elsewhere. His practice as a consulting architect and surveyor is very extensive, and

Carpenters' Company has also established a branch of its Technical Reference and Lending Library at King's College, and during the past few years has been devoting itself to the furtherance of technical work connected with the noble science of carpentry, aided greatly by the earnest help of Banister Fletcher, who is chairman of its Educational Committee. Besides having done much to popularise architecture as a means of educating ordinary tastes to an appreciation and love for the beautiful, by his delivery of an enormous number of lectures at public institutions, Banister Fletcher has written various works which have become the standing authority upon the subjects he has treated. They comprise "Dilapidations," "Light and Air," "Valuations and Compensations," and "Arbitrations," and he is at present engaged upon what will unquestionably be his most important contribution to the text books of his profession. Last year he was president of the Engineering and Building Con-

the wood-carvers' art. Dotted all over his rooms are lovely little bits he has picked up in his wanderings of the past thirty years—little bits from Florence and Normandy, Athens and Newington Causeway; little bits of no nationality outside their own charm; little bits he has found in old City houses, and from which he has carefully "pickled" the accumulations of a century's paint-work.

In the Administrative Council of the Metropolis, Banister Fletcher occupies an enviable position. He possesses a good voice and a clear and happy delivery, making him an excellent chairman and an interesting host. His two sons, who are associated with him in his work, show signs of emulating the energy of their sire. Mr. Banister F. Fletcher, the elder, having been the A. A. medallist for design in 1888, the Arthur Cates Student in 1889, the winner of the Godwin Bursary in 1893, and a Medallist of Merit in the Tite Prize of the Institute

Oak Door in Billiard Room for His Honour Judge Hall Q.C.



as an arbitrator and umpire he speaks with recognised authority. It is five-and-thirty years ago since he was elected an Associate of the Institute, and sixteen years later when he assumed the honours of full Fellowship; he is also a Fellow of King's College. West Newington claims him as its district surveyor, and he is likewise one of the surveyors to the Board of Trade. Elected Professor of Architecture and Building Construction at King's College, Banister Fletcher, with much energy, carried out his idea that such an institution should possess, for the benefit of its architectural students, a reference museum, which was partly fitted up at his own expense. It contains a fine collection of casts, models, diagrams, drawings and photographs, to which additions are constantly being added by the Worshipful Company of Carpenters (of which Company the Professor is a Past Master), by the Council of King's College, and by the leading manufacturers of building materials in many parts of the World. The

struction Section of the Congress of the British Institute of Public Health, and was appointed hon. president of the 10th Section of the International Congress of Hygiene and Demography at Buda-Pest. Even Parliament has not escaped his energetic attention, and he represented north-west Wiltshire for a short period in 1885, and only just escaped winning Bournemouth for his party at the last general election. Like all politicians, he has the only solution to the Home Rule question, and he is welcome to keep it. Anything more antagonistic to the study of an artistic profession than membership of the House of Commons it would be impossible to discover, and it is indeed lucky for architecture that Professor Fletcher has made the practical and theoretical side of his work his first ambition, and that in this he has succeeded, beyond any of his compeers, no man will question. Yet it is odd that the one great hobby of this delightfully practical man should be the collecting of specimens of

during the present season. Like the Professor, they have also interested themselves very deeply in the welfare of the Building Trades' Exhibition, which is undoubtedly the best of the series yet seen in the Metropolis.

The diocesan monument to the late Bishop Claughton, of St. Albans, is now finished. This memorial, which is the work of Mr. Forsyth, consists of a recumbent effigy of the late Bishop, executed in the purest statuary marble, resting upon a cenotaph, mainly of alabaster, enriched with coloured marbles and armorial bearings. It is set up in the north transept of the Abbey.

The Halifax infirmary buildings are to be purchased by the Town Council as a site for the proposed new police offices. The Council is in favour of erecting police offices and a Court-house at a cost not exceeding £8,000. An enquiry has been held relative to the application of the Town Council for sanction to borrow £33,000 to complete the new markets.

ARCHITECTS OF TO-DAY: THE BUILDING OF THE FUTURE.

By MR. W. M. CONWAY.

BY the extreme courtesy of our contemporary, the *Daily Chronicle*, we are enabled to reproduce two of the charming copyright drawings by Herbert Railton, which appeared in the *Chronicle* last Tuesday, illustrating an article on "London Architecture: Its Past, Its Present, and Its Possibilities," by Mr. W. M. Conway. The article, though couched in a grandiose strain, evidences Mr. Conway's cheerful, if somewhat dreamy optimism, and contains practical passages of value and interest. Here and there Mr. Conway may be described as writing after the manner of Mr. Edward Bellamy, especially in his forecast of the future. Though we are loth to agree with Mr. Conway upon several points, notably his wholesale advocacy of iron and steel as building materials, and cannot say that his "model street"—seen even in the perspective of Time—appeals to our architectural sensibilities, we quote liberally from the article in view of its current moment. For the beauty of the drawings, and the brilliant way in which the *Chronicle* people have mastered the rotary's disinclination to print fine line blocks, we have a sincere admiration, knowing well the difficulty over-come. Illustrated daily newspaper journalism has scored.

Of almost every English town now standing, writes Mr. Conway, nine parts out of ten have been built in the present century, and almost during the lifetime of the present generation. Our towns have been built by jerry-builders—whole streets and quarters together—and the pleasure of the inhabitants was never so much as thought of. Architecture, therefore, of any sort was simply not produced. Four walls and a roof, with holes to let in light, doors to admit people, and chimneys for the exit of smoke, do not constitute architecture. There must be a definite intention on the part of the builder to give pleasure, either by mere excellence in the proportion of parts, or by added decoration. All over London you may see jerry-builders' advertisement decoration, intended to entrap the snobbishly minded into the belief that the building it is plastered on is "stylish," just as the duller sort of tradesmen advertise what they are pleased to call "art colours," as though all colours were not in themselves equally artistic, the art lying merely in their combination. Thus, for example, you will find, nine times out of ten,

decoration stuck on to the upper part of a building, where it is of necessity invisible from the street. It looked well enough, no doubt, on the architect's elevation, and served the purpose of a commercial architect by taking in a commercial employer. If you want to find the best domestic architecture of our day, you must search out the houses which have been built for people who intended to live in them. There is a charming little Gothic house at the bottom of Park Lane, which no one would have built to let; there is the really admirable Yellow House in the Bayswater Road, and the Red House near it; and there are a few more scattered about the town. But most of the good modern houses are in the suburbs of our large towns. The good ones are

a decided success. Its outline is good, and it possesses dignity of mass. Seen from the river on a normal London day, it is an impressive object, and in the perspective of the Thames Embankment, its simplicity forms a valuable contrast to the fretted elaboration of the Houses of Parliament. But the best test of the present architectural tendency, whether it be upward or downward, is not so much a comparison between scattered existing buildings, but a comparison between the younger generation of architects and those of five-and-twenty years ago. No one will deny that, whatever the general aspect of our towns may be, there are growing up to-day a larger number of promising young architects than has been the case for a long time. They arise out of the same movement

that has been producing the new group of sculptors and decorators whose like England has probably never possessed in such number as now. But these architects—what will their architecture be like? Will it be a new architecture, or will it merely be the old, well-designed, if you please, instead of ill-designed, but in principle the same? Undoubtedly it cannot but be new. No style of art or fashion can ever be recalled, for the art of any day is the expression of the people of that day. At the present day all the styles of the past are known and understood, and experiments are constantly made of combining and compounding them to suit modern needs and methods of construction. Out of these experiments a new style will arise, but he would be a bold prophet who would undertake to describe what it will be like. There are four factors which an architect must always consider—the purpose for which his building is to be used, the materials of which it is to consist, the position it is to occupy, and the atmosphere through which it is to be seen.



THE YELLOW HOUSE, BAYSWATER: ERNEST GEORGE AND PETO, ARCHITECTS.

numerous in absolute quantity, but, of course, few in proportion to the bad. The provision of large flat surfaces, in suitable positions and of suitable dimensions, is always advisable in London, through whose grey and dense atmosphere large masses and bold outlines alone have value. It is seldom nowadays that a series of houses forming the side of a street are designed as a whole. Modern public buildings in London have in most cases been conspicuously ugly, but exception must be made in favour of the New Scotland Yard Bastille on the Thames Embankment, a building much criticised at the time of its erection. It has stood the test of criticism, and is now admitted to be

Who shall say what are to be the conditions of life in the next century in England? London will either spread over all the home counties, and concentrate with electric swiftness for its day's work, or it will pile itself into the air and become a city of towers. Probably both these developments will go on together. One thing is certain—the building materials of the future will not be those of the past. Stone, wood, and brick have had their day, and the age of metal has begun. Steel girders have supplanted arches. The functions of concrete, in combination with steel, are many. But perhaps steel will give way to aluminium, and concrete to paper. Imagine a city of aluminium and paper build-

ings made to take to pieces. A man would move his house from place to place as easily as he now moves his furniture. There would be no more building leases. No one would dream of buying the freehold of his site. Towns would wander about as fashion and convenience dictated. We should dwell, as it were, in tents like our remote forefathers.

The coming architecture will have problems to confront such as no architects of the past have confronted, for it is evident that the day for buildings of great size has come. The miserable miles of little badly-built houses run up in haste to hold our suddenly-increased town populations were not made to last. They will be replaced by houses for which Chicago Exhibitions will be the shops. A brave County Council might lay out the first artery of New London in the style of the future, and profit greatly by so

you pleased. Here and there would be public lifts by which the various levels would be accessible from the street. The perspective of such an avenue, with the tiers of arcades on either hand, the bridges across it at different levels, and across the side streets turning out of it, would be beautiful, if good proportions were obtained, especially in the grey English atmosphere, wherein details of decoration vanish, and the architect's chief power to charm lies in the balance and relation of masses. Each block of houses forming the street would be built around a square, access to which would be obtained for the purpose of all services by back streets for carts entering by archways. All the pavements being covered, foot-passengers would be enabled to defy rain. If the street were wide enough, there might be an open cutting

GETTING ON APACE: THE NEW LINE TO LONDON.

THE New Line to London is getting on apace. Although the severe weather has retarded progress in most of the localities covered by the seven contracts into which the work is divided, the important tunneling operations at Nottingham have not been affected, and one of the contractor's engines ran right through a section the other day. At the Company's Gorton Works, fifty engines are being built for use on the extension to London. They are express passenger bogie engines, seven-feet coupled driving and trailing wheels, and in size the next to the "Greater Britain" class of the London and North-Western. The boilers will be 170 lbs. pressure; 4,000 gallons of water will be carried, instead of 3,500, as borne



NEW SCOTLAND YARD: NORMAN SHAW, ARCHITECT.

doing, for in the midst of five millions of people only large schemes can pay. The street would run, let us say, north of and parallel to the Strand. It would be as wide as Portland-place, or wider. The whole would be built on a single scheme. The ground floor right along would be shops. The broad pavements would be arched over with arcades open to the street. On the top of the arcade would be a first-floor pavement by which access would be gained to the houses or shops on the first floor. This pavement would be carried across from block to block by bridges, and other bridges would be flung across the main thoroughfare at convenient intervals. The second, the third, the fourth, and I know not how many more stories, would be similarly treated. It would be possible to circulate all over the whole new area at whatever level

down the midst for an electric railway, and on either side of it, under the roads, would be tunnels for the many pipes which modern life employs. Avenues of this sort carried in all directions from the heart of a great city towards its suburbs would enable communications to be direct and rapid. Near the centre the houses would of necessity be very high; they would diminish in altitude as the circumference was approached. Such buildings would accommodate many more inhabitants per acre than are packed into our densest slums. The various social strata of the population would be able to live near together in different stories of the same group of buildings. People might again live over their shops, and only the manufactories would have to be banished from the area devoted to distribution and consumption.

by the present type. The larger quantity will lessen the necessity for stoppages, with their inevitable risks of delay in stormy weather. Good speed will be got out of these noble engines, certainly sufficient to do the run from Manchester to London within the time now taken ($4\frac{1}{4}$ hours), at least. A little later the Manchester, Sheffield and Lincolnshire Company will invite tenders for the construction of 76 engines, in addition to the half-hundred they are themselves building at Gorton. That will be the largest order given out in engines for many years in this or any other district. Afterwards will come the carriages and waggons; these are much more speedily put together than the engine, which is the head and front of train things.

THE enlargement of the workhouse of Thrapston, at a cost of £1,500, is under consideration.

"STRAY THOUGHTS ON COMPETITIONS."

By MR. G. H. WILLOUGHBY, F.R.I.B.A.

WE publish extracts from a paper recently read before the Manchester Society of Architects, by Mr. G. H. Willoughby, F.R.I.B.A. The pressure upon our space compels us to curtail the context here and there, but we are glad to be able to print the gist of Mr. Willoughby's excellent "Stray Thoughts on Competitions."

A paper on "Competitions" as at present in vogue, said he, has its own field of usefulness, and may prove of some little value to our younger practising architects as well as to those who aspire in the near future to become practitioners. I have classified my "Stray Thoughts" into three main headings, viz.:—Firstly—The professional aspect of competitions. Secondly—The public aspect of competitions. Thirdly—A few general objections, and remedial suggestions. Doubtless, the "first" thought uppermost in the mind of most architects, reared in the midst of this busy commercial community, will be, "Does competitive work pay?" Let me say, at once, that my adherence to and advocacy of the system of competitive work as a legitimate means of furthering the practice and enhancing the position of our younger practitioners constantly gains strength. There is a disposition I know, among certain of our professional critics, to judge every enterprise by its event, and believe in no wisdom that is not immediately endorsed by success till they sympathise with nothing for which they cannot take out a policy of insurance. But have we not many recent instances of earnest and hardworking men who, mainly by their dauntless and untiring energy and perseverance in competitive work, have risen both to eminence and affluence? Not only to the followers of his own profession, but also to the World at large, Mr. Waterhouse affords a good example of what the possession of great talents may effect when combined with steady cultivation, careful study and patient application. Mr. Waterhouse has trodden no royal road to achieve the success which for some time has been his. It is only the reward for many years continuous hard work, the foundation of which was laid by his success in competitions. Sir John Lubbock, in his "Pleasures of Life," has told us—"That there never was a time when modest merit and patient industry were more sure of reward." Close around in this great city lies work enough to task every head and heart among us, and I venture to affirm that, if we only do the smaller work undertaken thoroughly and faithfully the larger is sure to follow.

From my point of view, it is a mistake to suppose that the profession can dispense with healthy, stimulating competitions. A man never knows what is in him until he has measured himself with his fellows in real honest work of this kind. Consider what a large field for effort is presented to our younger men at the outset of their career, when youth, with its enthusiasm and capacity for work is so strong. With many, the commissions which they have in hand, fail to fully occupy their time. Does not the opportunity thus afforded through the medium of competitions—and which, I think, is confined to our profession—create, if grasped, a lasting habit of steady continuous application and activity, a prelude to the time when hands and head will be fully occupied on more certain work? In my advocacy, however, for the full display of our enthusiasm and energies through the channel thus presented, in order to lay the foundation for a successful career, I should not like you to be under any misapprehension as to my procedure. Our aim should be to guard against apathy on the one hand, and excessive and

exhausting labour on the other. Still, there may be among my hearers—to some who yet will be disposed to doubt and reiterate my opening query—"Does it pay?" Let me remind you of the endless opportunities which cross our path through the medium of competitive problems for the study and investigation of the many kinds of structures the architect of to-day is called upon to design. Frequently are we compelled, before making a new venture, to seek, and then to thoroughly satiate ourselves, with the ideas and treatment we find in the best and most successful work of our eminent modern practitioners, both by the careful perusal of illustrations, as well as a personal inspection of their erections. The knowledge and grasp of the requirements of any structure thus acquired—as well as the familiarising of oneself with the mind and method of some eminent specialist—will be a clear gain to the earnest competitor, and from my own limited experience, I can affirm the result will be a joyous one; and will, in the near future, bear succulent fruit. It is recorded of Sir Joshua Reynolds, that he once said, in reference to his own profession—a sister art to ours—"He who never ransacks any mind but his own, will soon be reduced from mere barrenness to the poorest of all imitation. He will be obliged to imitate himself, and to repeat what he has before often repeated." Is not the "trend" of some of our younger men, who look askance at competitive work, to drift into that self-satisfied and crystallized state, while their work ultimately becomes reduced from mere architectural barrenness to the poorest of all imitations, having to repeat what they have before often repeated. But I can anticipate some very correct and precise brother practitioner—a past master of styles—demurring against the doctrine I have recently been advocating, and which, in his eyes doubtless is bordering on plagiarism. So far as the "clothing" of the structure is concerned, with certain reservations, I can fully concur, but as to the skilful planning of an edifice, wherein you will all agree a large share of the success of competitive work lies, we must work with an open and a receptive mind, ready to gladly welcome and to adopt any new ideas and fresh treatment that may commend themselves to us, from whatsoever quarter we may obtain them. A few years ago, at a meeting of the Royal Institute, the President for the Session in his opening address, especially laid stress on the necessity of our profession producing living progressive Architecture. As his remarks seem to me so very apposite and bear out what I have been endeavouring to lay before you, I will quote them. He said:—"It is certain that the past did not respect its own past as we do ours, and our practice, commendable as I think it, has, no doubt, its dangers. If we are for ever dwelling on the past, we shall not be self-reliant, and if not self-reliant, we shall never be bold, originating Architects. We may love and reverence the past as Archaeologists, but as Architects let us not forget that Archaeology is the bane of living progressive Architecture, and if our art is ever again to evoke popular enthusiasm, it must do so by embodying the thoughts, the aspirations, and the genius of the living people for whom we build." There is one more "thought" so intimately connected with the whole question—viewed from the professional side—that I think it ought not to be passed over without comment, however briefly. It is the deplorable preponderance of misdirected effort competitive work produces. One is confronted in almost every competition with the melancholy sight of many meritorious Architectural productions, possessing picturesqueness of grouping, excellent proportions, combined with artistic and well-designed detail, yet, having all chance of their success nullified by the utter

unsuitability of the design, which is frequently mated to an indifferent and ill considered plan. These artistic, but impracticable productions, are greeted with the admiration both of the profession and the general public, but command nothing more substantial. Those who allow their prolific pencil to have the upper hand, resulting not unfrequently in relegating to quite a secondary consideration the actual needs and inexorable stipulations of "Competitive Instructions" given for their adherence, and who prefer to follow the bent of their own sweet will and pleasure, are only amusing themselves. It is misapplied energy, and any chance or probability there is, of their clever but impracticable designs being chosen, becomes merely a vision of their own romance. Mr. Ruskin, in his "Seven Lamps," has written:—"I do not know so magnificent a marking of human authority, as the iron grasp of the Venetian over his own exuberance of imagination." May we not also profit by this estimable trait of human restraint in the Venetian Architect?

Before passing on to my next heading, I should like to say a word or two with regard to the etiquette aspect of Competitions. There is still floating about, even among many practising architects, who on other matters are not without intelligence and discernment, that strange notion, that to be engaged on competition work is somehow derogatory from a professional point of view. These men, who ought to know better, ceaselessly deprecate, in very doubtful taste, the praiseworthy efforts made by their more enthusiastic and energetic fellows through this medium presented to them. Let me, in concluding my remarks under this heading, urge upon every practitioner, devoted to his work, neither to be daunted nor baffled by any retrogressive hindrance that may arise either from within or from without, but to spend every resource and every effort in the prosecution and furtherance of so great and so noble a profession, to which it is his privilege to belong. I will now pass on from the practitioners' view of competitions to that of the general public, and briefly consider how this section of our work is regarded by them. To-day, almost every municipal or educational body, be it corporation, trust, board, or committee, having the erection of some structure in prospect, either of an ecclesiastical or of a secular character, usually relies on the competitive system to obtain a suitable design. Of the frequency of this procedure I think you will all bear me out. In the first place, by this method a strong belief and advocacy in the policy of "Free Trade" is shewn. Liberty also is afforded for any qualified practitioner to dispose of his wares, i.e., the product of his brains and skill, wherever that kind of merchandise is in requisition; and thus a wide field of additional opportunity and usefulness is opened out to us, one which may largely conduce to the greater prosperity of our profession. Again, the competitive system is largely instrumental in bringing about an entire immunity from those petty jealousies which we all deplore but which are frequently experienced in many provincial towns, where several practitioners are about equal in status, professionally and socially. If competitions be framed or conducted on strictly equitable lines (which is of paramount importance and to which I shall shortly refer), then the spirit of emulation being stirred, each competing architect is depending entirely on the merit of his effort, and not on the number and the influence of his friends. It follows that the discreditable and unprofessional touting—which is greatly to be deprecated, but which is only too frequently resorted to—at once ceases, and a more honourable and equitable state of things is obtained. There is one other advantage I should like to point out: that the public obtain through their encouragement and adoption of competitive

work; it is the benefit of having any contemplated architectural project attacked by a number of distinct minds, and the results submitted for their inspection and choice. Frequently one's attention is arrested, whilst inspecting competitive designs, by some that exhibit a freshness of conception, an originality and a boldness, doubtless drawn out by their author's zeal to excel, and which I venture to state would not be obtained through any other agency. My paper would be wanting and incomplete were I to omit any allusion to the abuses that occasionally are perpetrated through competitions, and to which practising architects are liable to be exposed. I think also a remedial suggestion or two may not be out of place. Perhaps the time has now come when the question may be asked: Are the means usually adopted in the framing and conducting of competitions to-day such as can command general approval? In the majority of instances, recently before the profession, this unquestionably has been the case. For some time a marked "upward trend" has been shown by the public at large in the framing and conducting of competitive work, and in the strong inclination and wishfulness to act with strict impartiality. Is this not only a very gratifying, but a very stimulating augury, especially to our younger practitioners? But there is also another side—the seamy side. Many of us will recall with pain the heart-burning and strong sense of indignation we have been occasionally subjected to by a flagrant deviation from rectitude and fair dealing on the part of the promoters of some competition into which we have been cajoled to enter. The indifference displayed by such unscrupulous people to the inexhaustible patience, time and labour, that architects have fruitlessly given, is so inconceivably deplorable that it will hardly bear discussion. The question as to how this particular evil is to be remedied forms part of the larger question affecting the whole subject. Have we not the remedy mainly in our own hands? It is invariably the case that in these "questionable" competitions, the "instructions" are neither drawn up on lines suggested by the Institution, nor by some practitioner, nor is any mention made as to the promoters' intention to call in a professional man to advise in arriving at a decision. With these very ominous omissions clearly before us, it is our duty to our profession, as well as to ourselves, to leave all projects framed on such doubtful lines severely alone, and I, for one, shall gladly welcome the day when every practising architect shall consider it his duty, as well as his privilege, to become a zealous and enthusiastic supporter of the Royal Institute, thus further to strengthen its hands, by which alone it can successfully cope with some of the disabilities we still have. Perfectly, I am aware, that in my adherence to and support of the Institute, as the remedy for wrongs, I am at variance with some of my fellow workers, who are hostile both to my views and my method. In this room I have heard persistent indictments hurled against the Institute and its doings, displaying a curious example of misdirected indignation, in my opinion, totally and absolutely unwarranted. In a recent annual address given to this society, Mr. Knill Freeman, the then president, referred at some length to the importance of this matter, and, summarising his remarks, said: "It is by association with the Institute we shall best strengthen our own position, whether individually, professionally, or as a society. In each of these relations our advantage in the connection is clear, but even if it were not so, our duty is plain, and we are not, I am sure, likely to ignore it." Should not words so forcible and significant, and coming from one of our older members who has borne the burden and heat of the day, induce those of our fellow workers, who

at present stand aloof, to take a broader view, and play a worthier part in fostering and advancing our professional privileges and rights, not only for our own progress and advancement, but for those who will come after. In my appeal for this, I will close by a quotation from Ruskin. One which, I think, fully endorses the soundness of my advocacy: "When we build, let us think that we build for ever. Let it not be for present delight nor for present use alone; let it be such work as our descendants will thank us for, and let us think, as we lay stone on stone, that a time is to come when those stones will be held sacred because our hands have touched them, and that men will say, as they look upon the labour and wrought substance of them, 'See! this our fathers did for us.'"

ARCHITECTURAL IRONWORK: CONSTRUCTIVE AND DECORATIVE.

*A Series of Instructive Papers for the
Artist and Worker.*

CHAPTER V.

BEAMS AND GIRDERS.

IN the old days of timber-building all beams and girders were, necessarily, of timber, oak being extensively employed. The first step towards the utilisation of iron in this direction was made by the construction of composite girders. When a very strong girder was required to sustain an extremely heavy load, it was found better to build it up of several stout scantlings of timber, securely bolted together, than to use one solid log or baulk. A further improvement was afterwards effected by using a flitch, or plate, of cast iron for the central portion of the girder, having flitches of timber on each side of it, and the whole strongly bolted together. From this composite member the cast iron girder was a necessary and certain evolution. Considerable knowledge of the stresses incident to architectural construction has been brought to bear on the important point of the best manner of proportioning horizontal iron building members, such as beams and girders, and accidents seldom occur through weakness of these architectural members at the present day, though such do now and again happen. The sectional form of iron beams and girders generally differs from that of similar members

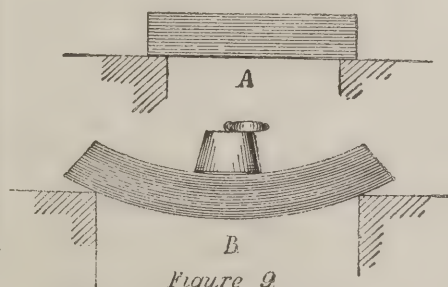
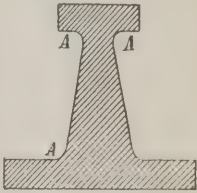


Figure 9

when these are constructed of timber, which, of course, is now very rarely the case. These latter, when used, consist of squared bulks of oak, pine or other suitable timber, have a rectangular and usually parallelogrammatic section. In consequence, however, of the progress of statical inquiries of late years, great scientific technical investigators have carefully studied the different stresses incident to such beams, and the behaviour of these latter under such strains and pressures.

In considering this subject philosophically observers have viewed a beam, a wooden one primarily, as composed of a series of fibres running longitudinally in the direction of the "grain" of the wood, as shown at A in Figure 9, which roughly represents a

beam or girder having a bearing at each end. If now this experimental beam be loaded in the middle, as the weight is added, the beam will become "ragged" or deflected in the middle, until it becomes concave on its upper surface and convex on its lower plane. This fact shows that the uppermost fibres are being subjected to a compressive or "crushing" strain, and the lowermost to an extension, tensile, or tearing strain, a rough idea of which we have endeavoured to convey at B in Figure 9. This fact will be rendered more evident if weight be added until the beam is ruptured or broken. It will then be found that the fibres of the lower surface of the beam have been torn asunder, while those of the upper surface are compressed, being squeezed and crumpled up at the points of fracture. Anyone can verify this by bending a stick or bit of firewood to the breaking point. As it necessarily follows that the crushing strain is most severe at the upper surface of the beams, and becomes less as it goes downward; while, on the other hand, the tensile stress is most severe at the bottom of the beam, and lessens as it goes upwards, there must be a point in the centre of the beam where these strains neutralise each other, and where the fibres are neither influenced by compression or extension. This point is known in scientific phraseology as the "neutral axis," and remains unharmed until an absolutely crushing weight is applied, under which at length it is compelled to succumb. The foregoing facts are of importance, as they constitute the principles which have led to the form of girder section generally adopted in iron, that is to say, two flanges connected by a central web, more or less closely resembling this , or an aitch sideways. In considering B in Figure 9, the designer perceives that the stresses to which such a member is subjected take effect mainly upon its upper and under surfaces, and that the central part containing the neutral axis is only important as uniting the upper and lower portions. As wood was a comparatively cheap material, a large beam having an extensive rectangular section could very well be employed. With iron, being a relatively costly material, and more so formerly than now, it was, however, perceived that such a section was both wasteful and unnecessary. The designer then provides his upper surface to resist compression, and his lower to endure extension, and dispenses with all intermediate material except a narrow web to unite these upper and lower surfaces or "flanges." Thus, then, the ordinary or I shaped section of the girders at present in use is scientifically arrived at. As, however, the tearing strain is more severe than the compressive one on such a member the upper flange is very often made less wide than the lower one, and the section shown at Figure 10, shows the shape very often adopted at the present time, although such is not universally the case, while in the earlier days of the employment of iron as a building material it was otherwise. From its form this section of girder is very usually termed a T-girder. That this is the most stable and useful figure of section has not only been deduced from philosophical reasoning, but fully and conclusively proved by actual experiments conducted by experienced technologists.

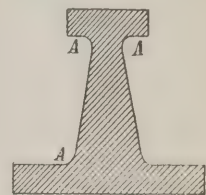


Figure 10.

(To be continued.)

THERE are two hundred and six thousand four hundred and fifty-six miles of telephone wire in England.

"IRON AND BRASS."

By MR. J. W. SINGER.

[Being Continued Abstracts from a Paper read before the Architectural Association.]

HOW wide a subject is that of iron may be understood in mentioning that in Great Britain alone, there are 16,000 places where the same is dealt with in some form or another, and 7,000 persons as principals are engaged in carrying out industries closely connected with it. Even the various forms of iron are each a study not easily mastered, there being so many varieties of this metal, each of which is again subdivided into many brands, even the furnaces for the raw material producing many different sorts, some turning out Hermatite, others the kind called "Mine," or "Part Mine," also cinder or Ferro-Manganese; and in steel works there are the different sorts of Bessemer, the open hearth, and the crucible. There are also thirty-four distinct allied trades connected only with the manipulation of iron, not including the production of the raw material, from anchor-making to wire, chain, and rope making, nail works, &c. There are many varieties in even the sub-division of wrought-iron, the merchant from whom we purchase this metal, having on his list eight sorts of wrought and fourteen kinds of steel, the wrought-iron varying from £6 10s. up to £22 a ton, the steel running from £12 to £68 a ton. Each of these would have a different brand or mark, each of the varieties being the production of a special firm. To ensure good iron being used, it would be well for every architect to know the hieroglyphics on it, as the appearance of bars at £6 10s. a ton is much the same as that costing three times the amount. Thus the cheapest iron is Welsh, having A and a crown impressed on the bars; the next is that having N H and S with a crown—this being Staffordshire—costing £7 5s. a ton; the next quality has Netherton Best, with a crown between the words; after this, comes the old brand of B. B. H., this is £8 10s. a ton. S. C. with a crown is very fine iron at £10 10s. a ton; charcoal iron has the letter L in a circle, this being £17 a ton, and is used for cylinders, boiler-plates, and engine-iron, where great tenacity is required. England has long been famous as the centre of the iron industry of the World; but I fear there is a warning that we have passed the zenith of our prosperity, for Germany and Belgium are fast treading on our heels, the President of the Iron and Steel Institute, in his late address, giving a warning when speaking on this subject, saying that from 1873 to 1875 our exports had fallen from thirty-seven to twenty-five millions' worth of iron, that is twelve millions less in only two years, and at even that low state they were five millions above the exports of 1893, which deplorable state of things arose from the increased price of coal, and the lamentable strikes throughout the land, although the wages paid to our men were fifty per cent. above foreign workmen. With such competition how can England compete with the World in this industry, and her greatness in the iron trade, is I am afraid, a thing of the past, unless a change comes over the mind of the British workman. Where iron plays an unassuming but useful rôle as an accessory or adjunct, to a building it finds its best expression. Within this limitation, quite enough field is left to tax all the energies of the metal-worker. Its strength, durability (if properly treated), and the way that it lends itself to every method of manipulation are the qualities that specially commend iron for application in connection with architecture, for screens, grilles, gates, lighting purposes, door fittings, &c. In door-fittings, for example, what force and vitality there are in some of the old hinges, from the almost

plain strap, with its few vigorous marks, to the forged and chiselled masterpieces of the twelfth, thirteenth, and fourteenth centuries. Possibly our modern smiths will never excel them. I venture to hope, however, that in another branch, namely, screens, we may yet make much advance. The old smiths laboured under many disadvantages in this respect compared with ourselves. They had no machinery as we have for producing bars of all shapes and sizes. Thus for large screens they had to fall back upon wood and stone. Screens may be made to exhaust all the resources of the metal-worker—forging, chiselling, piercing, repoussé work, enamel and addition of various metals, mouldings of all sections, and tracery, scrolls, and leaf-work of every kind. I need not mention that several eminent architects have drawn attention to this interesting subject, and I little doubt that it will receive still more in the future. There are several features that should make us hopeful of the future of iron-work in this country—namely, the attention now given it by architects, also the help now rendered it by science, so that good iron and steel can always be obtained with care in selection. I think I am also justified in saying that many of our smiths have attained a wonderful amount of skill. No doubt what we most lack is the taste, or instinct, for what is within the power of the material. Also probably we are only gradually learning how much of the work should be done within the glare of the smith's fire, and how careful one has to be not to take the life out of the work afterwards. I must now say a few words upon the subject of brass. From an artistic point of view this metal does not hold so high a position as bronze, as it is inferior to the latter in many important qualities. Its colour is not so good, its contraction in casting is greater, and in a molten state it does not run so freely into the mould; also it is not so satisfactory a metal for the chaser to manipulate. Still, it is the better known and most-used metal of the two, one reason being doubtless that it is cheaper, unfortunately a most important consideration in these days. Bronze is the metal in which the sculptor usually produces his work in metallic form; brass, on the other hand, being the metal we see around us in the numerous objects of everyday use. Brass is a compound alloy of the two metals copper and zinc, bronze being an alloy of copper and tin; and it is difficult in any historical account of these metals to distinguish clearly which is intended in any earlier mention of brass than 1721, when zinc was discovered, or rather produced by Henckel, as a commercial metal. But the word brass has been used far longer than this idea of the metal as is now understood by that term, and the name for it has been supposed to come from the Spanish word "bravas," meaning the colour of flame, our word "brazen," with its many meanings, no doubt being derived from the glaring appearance of the polished metal. It may have been bright copper or bronze of which the brazen serpent was made for Moses, and so also when we read of "Brass as precious as gold" for the vessels which Ezra caused to be made for the Temple; but this much is certain, that all the metal work which Layard found at Nineveh was made in bronze and not brass. So, no doubt, was the famous Colossus at Rhodes, 105 ft. high, taking twelve years to make, costing 300 talents, equal to about £118,000 of our money. The progress in modern manufacture may perhaps be in some way indicated when I mention that our firm has been allowed less than the same number of months to reproduce a monument in bronze about half the size of the Colossus, and I regret to say that for this work we receive only about one-hundredth part of the sum that was paid for the Rhodian giant. That it may be seen how difficult it was to produce large pieces of so-called brass, I may

mention that up to the fifteenth century it was found impossible to make a piece of metal which could be hammered out as sheet brass beyond about 2 ft. square, whereas now it can be had 20 ft. long, but even at this late date the metal was more bronze than brass, from its having tin in its composition. Brass as a metal was so costly, that in the sixteenth century they often destroyed earlier memorial brasses by turning them round and cutting the new designs on the back of the older ones. Brass-work, strictly so called, was not attempted in England before the time of Henry VII., and the railing round his tomb in Westminster Abbey was soon after made, the trade getting general in the time of Elizabeth, who encouraged workmen from the Low Countries to come to England. Yet in 1649, some large works established at Esher, in Surrey, proved a failure, ending in ruin to the founder. The next attempt was in 1678, when the Prince Rupert Mills were started. Then came some works at Hackney, called the Temple Water Mill Works, water being used to drive the hammer, this being before rolls were invented. After this came the Baptist Mills, at Bristol. Up to this time, brass was only produced by using calomine, and melting copper with it, but in 1721 pure zinc was produced, and great changes took place soon after in the manufacture of brass. As already stated, this metal is a mixture of copper and zinc, and these are run together in a state of fusion, in various proportions, to form the many kinds of brass that are needed—copper being the chief part of the alloy. The Japanese are said to have 200 varieties of these alloys, according to the colour they desire in the finished metal. The zinc group gives:—5 parts copper to 1 of zinc to obtain rich sheet brass; 4 parts copper to one of zinc for Pinchbeck brass; 3 parts copper to 1 of zinc for Dutch metal; 2 parts copper to 1 of zinc for ordinary yellow brass; 1.75 parts copper to 1 of zinc for pale brass; 1.25 parts copper to 1 of zinc for dipping brass; 1 part copper to 1 of zinc for hard solder, it being understood that the more zinc is used for the alloy, the cheaper is the metal produced, and the less durable it becomes. Although my remarks are upon brass, it may be well to give the alloy of copper with tin, *i.e.*, bronze, as these metals are so closely allied. 20 parts copper with 1 of tin gives a rich red metal; 10 parts copper with 1 of tin gives the best form of bronze; 4 parts copper with 1 of tin gives bell-bronze, which is brittle, and unfit for any other use. The best metal for taps, cocks, &c., is composed of 4 parts copper, 1 lead, 1 zinc, and $\frac{1}{2}$ of tin. Up to a late period of the last century the manufacture of brass was a slow and tedious process, taking at least twenty-four hours, as they used the carbonate of zinc, or calomine, with the copper, in taking that time to reduce the ore, and unite it with the copper; but now that the metal zinc can be obtained in a pure state, the process can be completed in about an hour, for as soon as the copper is melted, the zinc is then added, either in a molten state, or is plunged down to the bottom of the molten copper, and then well stirred, or in the casting, the zinc being the lighter metal, will be found too much in the upper part of the casting. Any of the above alloys can be easily cast, but no ornamental work, or any object, excepting plain block ingot, can be cast in copper alone, the contraction of this metal in its pure form being so great that, when cooling from the molten state, it pulls itself to pieces when anything prevents that contraction. The difficulty attending contraction will be seen when I mention that the base of the statue of Lord Napier contracted just over one inch, and if provision had not been made for this, this mass of metal, weighing nearly half-a-ton, would have pulled itself to pieces in cooling.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

Leicester Trade Unions.—The Carpenters', Bricklayers', and Labourers' Unions recently demanded from the master builders of this town an increase of wages and a revision of the rules at present in existence, the new conditions to come into force on the 1st of April. Since then, several meetings have been held, both of the employers and the workmen, but the negotiations have not yet led to a settlement. The chief demands of the men are an increase of 1d. per hour by the carpenters and bricklayers, and of 3d. per hour by the labourers. They also desire a revision of the working rules, and the abolition of reference to an umpire. Conferences between the two parties have led to no satisfactory result, and on Wednesday week a meeting of the Employers' Association was held at the Bull's Head Hotel, to consider their future action. There were 61 members present, and it was resolved to reject the proposals of the men, both as regards the increase of wages and arbitration. The next step will be a further consideration of the demands by a joint committee of six of each side, and, failing agreement by them, the whole of the matters in dispute, according to existing rules, should be referred to an arbitrator.

The Monthly Report of the Board of Trade states that "in the building trades the percentage of unemployed in Unions making returns has increased from 8.2 to 10.1, compared with 5.0 per cent. in February, 1894. The plumbers, however, have been well employed at the end of the month"—an item of news which every householder will regard as a truism. "A further decline is shown in the furnishing and wood-working trades, the percentage of unemployed in Unions making returns having risen from 6.7 to 7.0, compared with 5.8 per cent. in February, 1894."

Messrs. W. & R. Leggett.—This firm have lately completed, or are about to complete, the work of fixing their fanlights and other gearing to a large number of buildings. They have also again succeeded in obtaining the contract for a term of years from the London School Board for the whole of the fanlight and other gearing in their schools; Brighton Public Baths, Buckingham Palace alterations, North-Western Fever Hospital, Hampstead; South-Eastern Fever Hospital, Old Kent Road, London; new disinfectant, Newington Vestry; London Hospital, Whitechapel; St. Luke's Union, administrative blocks, London; Fulham Union, administrative blocks; St. Olave's Grammar Schools, London Bridge; Ward's School, Thames Embankment, London; Guildhall School of Music, London; Goldsmiths' Institute, New Cross, London; Grocers' Company Hall, London; Bishopsgate Institute, London; Woolwich Public Baths; Bow Baths and Wash-houses, London; Barclay & Co.'s Bank, Cavendish Square, London; Hong-Kong and Shanghai Banking Corporation, Lombard street; Holloway's Sanatorium, Virginia Water; Reading Town Hall; Vaudeville Theatre, London; Reading Union; Tivoli Theatre, London; Public Library, Drury lane; Central Hall, Holborn; New Admiralty Buildings; Drill Hall, S.T.H., Bow; Drill Hall, Bunhill Row, E.C.; Imperial Institute, Albert Gate; Hymers College, Hull;

Aston Baths, Birmingham; Technical School, Gloucester; Cornwallis St. Baths, Liverpool; Soap Works, Port Sunlight; Dye Works, Apperley Bridge; New Baths, Farnworth, Lancashire; New Infirmary, Halifax; Yorkshire Penny Bank, Bradford; Craven Bank, Bradford; Lotherton Hall, near Saxton, Yorkshire; St. Ann's Church, Bishop Auckland, &c.

Carpenters' Hall Lectures.—A second course of Free Lectures on Carpentry and Joinery is arranged to be given at Carpenters' Hall, under the auspices of the Worshipful Company of Carpenters, on the five Wednesday evenings of May. The lectures are illustrated by take-to-pieces models, large diagrams, photographs, and specimens of materials. The syllabus for the course is as follows: May 1st, Professor Banister Fletcher, "Timber and Composite Roofs;" May 8th, Mr. Thomas Blashill, "Shoring;" May 15th, Mr. James Bartlett, demonstrator at King's College, "The Setting-out and Construction of Staircases, and Joints in Joinery;" May 22nd, Professor T. Roger Smith, "The Framing and Construction of Partitions and Floors and Temporary Structures;" and May 29th, Mr. F. R. Farrow, "Strength and Strains in Wood."

New Banking Premises.—A New Bank is in course of erection at Wimbledon for the London and County Banking Co., from the designs of Messrs. Chiston and Perkins. Messrs. Johnson & Co., Limited, of Wandsworth Common, are the general contractors. The constructional steelwork and fireproof floors being constructed by Messrs. Mark Fawcett & Co., of Westminster, S.W.

Heating the Vaudeville Theatre.—Messrs. Crompton & Co., of 148, Brompton Road, have recently carried out the electrical heating of the Vaudeville Theatre. At first it was contemplated to use a system of hot-water heating, but, after carefully considering the matter, the management decided that electrical heaters afforded a more advantageous system. Twenty-two "box" or wall radiators and four large portable radiators, all of the Crompton-Dowsing type, are employed, and they answer the purpose admirably. The temperature of the theatre is maintained at 60 deg., while the corridors may be as low as 40 deg. The heating arrangements are under absolute control, and any portion may be turned off or on at will. The electricity used is taken from the Charing Cross and Strand Electricity Supply circuits and charged at 4d. per unit, and when all the apparatus is at work 9 units are consumed per hour. With electric radiators there is no danger of fire, as there is no combustion, and the temperature is about the same as that of hot-water pipes. The electrical cables are of Henley's highest quality, switches, cut-outs, safety connectors, &c., of the best, and Messrs. Crompton endeavour to make this pioneer installation complete in every respect. Some difficulty was at first experienced with regard to the fire office and London County Council, as no rules were in existence which covered the case; but all the authorities appear now to be convinced that electric heating, when properly installed, is very safe, and perfectly suitable for public buildings. It is stated that electric radiators are often used in an auxiliary sense where sufficient heat is not obtainable in buildings heated by hot water. They are also useful for chilly evenings, and at times when it is not cold enough to work the whole system of heating, but a little warmth is required in any particular room or portion of a room.

"Joints in Woodwork."—We have received a pamphlet, written by Mr. Henry Adams, M.Inst.C.E., Professor of Engineering at the City of London College, on "Joints in Woodwork." Originally read in 1877, Mr. Adams' paper has proved its usefulness by the many reprints that have been called for. The practical side of the subject is clearly dwelt upon. It would be almost impossible for a workman of ordinary intelligence to go wrong with this little treatise in his possession. The reprint seems to have been brought up to date.

THE Monmouth Town Council has applied to the Local Government Board for power to borrow £20,000 for drainage and electric lighting.

SAWDUST.

ARRANGEMENTS for the forthcoming Art Loan Exhibition at the London Guildhall are almost complete. The galleries will be open to the public from April 23rd to July 13th, both days inclusive. The hours will be from ten to seven every weekday, and three to seven every Sunday.

KING HUMBERT on Tuesday laid the first stone of a monument to Garibaldi, on the Janiculum Hill. It is hoped that the monument will be completed and unveiled by September 20th, which will be the twenty-fifth anniversary of the entrance of the Italians into Rome.

It is a sad and gloomy fact that there are in London 980 common lodging-houses, which have nearly 60,000 inhabitants. In these warrens are about 9,500 women and girls, and of this number some 4,600 are under the age of 22.

At the meeting of the London School Board, on Thursday, the salary of Mr. T. J. Bailey, the architect to the Board, was raised to £1,000 per annum. General Moberly proposed that an honorarium of £500 be awarded to Mr. Bailey, for special services rendered by him. The proposition, however, was not carried.

A CABLE, 25,000 metres in length, has just been finished at Seyne, and will shortly be taken to Madagascar by the English chartered transport.

The foundation stone of the new buildings of the Manor Park and Little Ilford Constitutional Club was laid on Saturday afternoon by Mr. A. Money Wigram, M.P.

THE smoke from smelting furnaces is laden with metals of value, the most notable of which are gold and silver. At an American smelting works mechanical means are being taken to collect the suspended matter from the gases.

At the recent meeting of the Upper Stour Valley Main Sewerage Board, the tender of Mr. John MacKay, Smethwick, for No. 5 contract in connection with the sewerage scheme, which comprises the main outfall works from Cradley Pool to Whittington, was accepted, the amount being £16,327 11s. 6d. The highest tender received was £30,624.

THE new Conservative club was opened at Windsor last week. The building is situated in Peascod Street. In addition to other accommodation, the club has a large hall for concerts and meetings.

THE division of labour in the Government dockyards is giving rise to much dissatisfaction amongst the various classes of employés. The shipwrights contend that work which naturally belongs to them is given to the carpenters and joiners, and a similar grievance exists as between the boilermakers and the engineers. Lord Spencer has already received two deputations on the subject.

FOR the new Free Library at Perth, which is estimated to cost about £9,998, the design by Messrs. Campbell, Douglas & Morrison, of Glasgow, has been selected.

Roadway Making.—Roadway making is by no means an easy art in Canada, where frost frequently penetrates over 4 ft. below the surface, playing havoc with macadam if it is not properly drained. The great difficulty is to get a good and cheaper foundation. Mr. P. S. Gibson, C.E., of Willowdale, to overcome the difficulty, has adopted a combination of corduroy, macadam, and gravel. He lays down second-class cedar logs of 6 in. in diameter at the smaller end inside the bark. These are laid at right angles to the centre line of the road in straight or curved lines, and earth is rammed tightly between them. Upon this foundation is laid the macadam, consisting of good hard stone, broken in cubical form, and of a size to pass through a 2½ in. ring. This macadam, about 6 in. thick, is rolled and consolidated, and over the whole is laid a layer of gravel 2 in. thick. Drainage is attained by laying down tile drains, discharging into ditches on either side. This system of road making, though somewhat strange to us, is said to answer very well.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

"H. G.," Hatcham, S.E.—We are arranging or a series of plans. Thanks for your good opinion.

J. W. B., Leicester.—Any sketches you care to send us shall receive attention. Please let them be good!

"Sap," Alton, Hampshire, writes: "Would any correspondent oblige me with a solution? I have to pump 200,000 gallons in 24 hours; two-thirds would be from 6 a.m. to 6 p.m. The rising main will be 40 high, 440 yards long. What horse-power would be required, and cost (probable); also working expenses, about of steam, gas, oil."

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

SAWDUST.

At the last meeting of the Wellingborough Urban District Council the clerk submitted a report from Messrs. Hodson, engineers, Loughborough, which stated that the estimated cost of the works of sewage disposal was £10,215. They considered the most advantageous way would be for the Council to advertise for the execution of the work in one contract. Alterations and additions to the workhouse are also contemplated at a cost of £3,500.

THE building fund of the new St. Peter's Church, Eastbourne, the foundation stone of which was laid in the autumn by the Duke and Duchess of Devonshire, who gave the site and £5,000 towards the cost of erection, has just been further enriched, an anonymous donor having sent £5,000 for the chancel, which, owing to the want of funds, the committee had not intended to complete at present.

SANCTION to a loan of £4,500 for erecting an isolation hospital at Heywood has been obtained by the Town Council.

THE question of erecting municipal buildings at Ossett, the estimated cost of which is £8,000, has been referred to a special meeting of the General Purposes Committee of the Town Council.

It is announced that the Italian Minister for Public Instruction intends devoting 100,000 lire towards the restoration of the Coliseum. A sum will be devoted for this purpose yearly until the restoration of the building, externally, is complete.

THE scheme for the erection of a model lodging house at Peterhead has been approved by the Town Council. The cost is estimated at £1,200.

WHITECHAPEL thinks of going in for the electric light. The estimated cost is £45,000. At present the question stands over for consideration by the District Board.

MESSRS. CHELAND AND BUNGAR, C.E.'s, Belfast, attended the last meeting of the Bangor Town Commissioners and submitted plans and report in connection with the scheme for enlarging the gasworks. The plans were generally approved of. The cost is roughly estimated at £2,500.

THE plans prepared by Messrs. Everard & Peck for the new technical schools at Leicester, to be erected at a cost of £25,000, have been approved.

THE principal matter of interest to the outside public in the meeting of the Liberator Building Society, was the Official Receiver's confession that he had not yet found a purchaser for the great hotel on the Embankment, which will be ready for occupation in April, 1896.

THE Local Government Board of Wortley has authorised the Guardians to erect casual wards at the workhouse, the cost not to exceed £1,000.

THE West of Scotland Steel Trade Conciliation Board met in Glasgow and discussed the wages question at length. It was ultimately decided by a majority that the men would accept the 5 per cent. reduction.

THE Loughborough School Board has resolved to erect new school buildings. Mr. Barrowcliffe has been appointed architect to the Board.

WHEN it is known that there have been exhumed more than seventy thousand statues from the ruined temples and palaces of Rome, the reader can form some idea of the richness of the Vatican.

WITH reference to the Northside Bridge and Road question, Mr. Wood, engineer, who has been employed by the Joint Committee of the Corporation of Workington, and some of the representatives of the works at the north side of Workington, has sent in to the Committee three sets of plans, prepared under his survey. The estimated cost of carrying out the plans ranges between £15,000 and £20,000.

MR. F. E. P. EDWARDS, of the surveyor's department, and Mr. F. B. Hobbs, Waterloo, have been elected Associates of the Royal Institute of British Architects, after having passed the final qualifying examination.

ABOUT two hundredweight of water from St. Winefride's Well at Holywell is, it is understood, posted every night in sealed cans to all parts of the country, America, and the colonies. To accommodate the expected summer influx of infirm pilgrims, a large new hall is being got ready, fronted by a statue of the patron saint in white marble.

St. James's Park lake has been drained off and the mud is being cleared away. The work will take about three weeks.

AN enquiry has been held into the proposal of the Stamford Corporation to borrow £7,000 for a new cattle market.

UNDER the direction of Mr. Charles E. Ponting, F.S.A., of Marlborough, the restoration of the old Bristol High Cross, which was removed from College Green 128 years ago, has just been completed. Messrs. Harry Hems and Sons, of Exeter, were the contractors.

THE picturesque building known as the Old Palace at Southwell, which was purchased by the late Bishop Trollope, and presented by him to the see of Southwell, has been carefully and thoroughly restored by Bishop Ridding, and will in future be available as a Church House.

At the recent meeting of the County Council, the Fire Brigade Committee reported that owing to the increased price of materials since the architect made his estimate for the proposed new fire station at Fulham, his figures would be increased from £10,500 to £11,000. The architect also asked that as the building was to be erected a few feet back from the line originally proposed, a sum of £400 should be added.

SIR JOHN MILLAIS and Sir J. D. Linton have have just been honoured by the King of the Belgians by appointment as officers of the Order of Leopold. Mr. Alma Tadema has been elected President of the Royal Birmingham Society of Artists in succession to Professor Herkomer, whose term of office has expired.

THE Western Mail buildings at Cardiff, which were destroyed by fire about eighteen months since, have been re-erected on a much larger scale. The architects are Messrs. J. P. Jones, Richards, and Budgen.

THE work of constructing the new bridge over the river Dee at Queensferry, to take the place of the old and cumbersome ferry, was commenced yesterday on the excavations for stone piles. The total cost will be £15,000.

THE new Infirmary at Lancaster, which is being erected from designs by Messrs. Paley, Austin and Paley, at a cost of £25,000, is approaching completion. It has been decided to invite the Duke and Duchess of York to perform the opening ceremony.

A NEW Primitive Methodist chapel, with school and class rooms, is to be built at St. Ann's road, Heeley, to seat 700 persons, and cost £3,800.

CURRENT PRICES.

TIMBER.

K H B	4	× 11	1st & 2nd Yellow...	per Std.	£18	0	0
D O M	4	× 11	3rd	"	15	15	0
P B W	4	× 11	5th	"	9	15	0
S K B	4	× 9	1st & 2nd	"	15	15	0
P T W	4	× 9	3rd	"	13	10	0
↑ ↑ ↑	4	× 9	5th	"	10	0	0
M G & Co.	3	× 11	1st (Gromme) Yellow	"	15	0	0
N S A	3	× 11	2nd	"	14	10	0
D × M	3	× 11	5th	"	8	10	0
B S 1st S C	3	× 9	1st Onega	"	16	10	0
D D D	3	× 9	1st	"	15	0	0
H A B	3	× 9	3rd	"	13	10	0
D M	3	× 9	3rd	"	13	0	0
R S S	3	× 9	4th	"	10	5	0
M F D	3	× 9	3rd	"	9	15	0
* * *	3	× 9	5th	"	9	0	0
W S N	3	× 9	"	"	7	10	0
S K B	3	× 8	1st	"	5	0	0
B A T	3	× 8	1st & 2nd	"	12	5	0
S K A	3	× 8	1st & 2nd	"	8	5	0
H A B	3	× 7	3rd	"	10	0	0
O B B O L A	3	× 7	"	"	8	10	0
G W W	2	× 9	1st	"	11	10	0
H H H	2	× 9	4th	"	10	0	0
	2	× 8	u/s Yellow	"	8	0	0
	2	× 7	"	"	8	5	0
	2	× 6	"	"	7	10	0
	2	× 5	"	"	6	15	0
	2	× 4	"	"	7	10	0
	2	× 7	"	"	8	10	0
F R 1	3	× 11	1st White	"	10	10	0
* P *	3	× 11	2nd	"	8	0	0
E F 1	3	× 9	1st	"	9	5	0
J A S	3	× 9	2nd	"	7	15	0
	3	× 9	1st Spruce	"	10	0	0
	3	× 9	2nd	"	7	10	0
	3	× 9	3rd	"	6	15	0
	3	× 11	1st Pine	"	26	0	0
	3	× 11	2nd	"	17	10	0
	3	× 11	3rd	"	10	10	0
H H H	1 1/2	× 7	1st Yellow	per Sq.	0	14	0
D D D	1 1/2	× 7	3rd	"	0	13	6
S B S	1	× 7	1st	"	0	11	0
S A B	1	× 7	2nd	"	0	9	6
S-TERTIA	1	× 5	3rd	"	0	7	0
J F J	1/2	× 8	mixed Yellow	"	0	8	0
Oregon Pine	...	...	...	per Std.	£12	to	£15
Pitch Pine	...	...	...	...	£11	to	£12
"	fresh	sawn	...	per load	425	to	525
Mahogany, Honduras (logs)	...	...	per ft. sup.	33d.	to	63d.	
"	(large & prime)	...	...	...	9d.	to	2s.
"	Tabasco	...	...	...	3d.	to	53d.
"	Panama	...	...	...	3d.	to	5d.
"	African	...	...	...	24d.	to	7d.
"	(large & prime)	...	...	...	8d.	to	2s.
"	Cuba	...	...	...	33d.	to	9d.
Cedar, Cuba	...	...	...	...	3d.	to	5d.
"	Mexican	...	...	...	3d.	to	33d.
Sequoia (clear)	...	...	per ft. cube	1s.	10d.	to	2s.
Birch Planks	...	...	...	...	1s.	to	1s.

METALS.

Iron—Cleveland Pig	...	per ton	34s. 53d.	to	34s. 73d.
"	" Hematite	...	41s. 4d.	to	41s. 6d.
"	" Scotch Bar	...	per ton	£5	5s.
"	" Best	...	"	£5	12s. 6d.
"	" Extra Best	...	"	£6	7s. 6d.
Yellow Metal Sheets	...	per lb.	43d.	to	44d.
Copper—British, Best Selected	per ton	£42	5s.	to	£42 15s.
Sheets, Strong	...	per ton	£49		
Australian Fine	per ton	£42	10s.	to	£43
Lead—Pig	...	...	£9 16s. 3d.	to	£9 18s. 9d.
"	Sheet, English	...	£10 12s. 6d.	to	£10 15s.
Tin—English Ingots	...	per ton	£63	to	£63 10s.
Australian	per ton	£61	2s. 6d.	to	£61 12s. 6d.
Straits	...	per ton	£60 7s. 6d.	to	£60 17s. 6d.
Banca	...	"	£60 10s.	to	£60 15s.
Zinc—Sheet	...	per ton	£18	5s.	

In the Russian Emperor's castle of Zarskoje Tselo the roof was originally so richly gilt that, when it was repainted, the decorators offered twelve thousand pounds for the right to take away the gold before painting over it.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

Bow, E.—For the erection of a school in Bow Creek, Tower Hamlets, to accommodate 402 children, for the London School Board—

Nightingale, B. E.	...	£12,898	0	0	...	£135	0	0
Gregar and Son	...	10,954	0	0	...	88	0	0
Wallis, G. E. and Sons	...	9,868	0	0	...	128	0	0
Reed, A., and Sons	...	9,836	0	0	...	87	0	0
Godman, W.	...	9,703	0	0	...	102	0	0
Pattinson, S. and W.	...	8,935	0	0	...	130	0	0
Mowlem, J., and Co.	...	8,923	0	0	...	70	0	0
Cox, C., Ash-grove,	...	8,590	0	0	...	115	0	0
Hackney (accepted)	...	8,139	0	0	...	102	14	0
Charteris, D.*	...	...	...	...	...	...	...	...

* Withdrawn

A.—Amount included for building brickwork in cement [(a) Cost of school buildings and closets, £4,433; (b) tarpavement, playgrounds, and drainage, £998; (c) boundary walls and gates, £1,684; (d) one room for teachers, £100; (e) schoolkeeper's house, £567; (f) extra depth of foundations, £693; (g) building the whole of the brickwork in cement, £115; total, £8,590. Cost per head of (a) £110s. 6d.; total cost per head, £21 7s. 4d.]

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

BRICKS 2½ or 3 inch PRESSED BRICKS Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.

Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.

MELLOWES & CO. Works, SHEFFIELD. LONDON, 21, Bishopgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO

TILES MOSAIC FAIENCE Poole Dorset

The Builders' Journal is published at 3 a.m. on Tuesday mornings, and should be obtained from any Newsagent in the Kingdom the same day.

BRADFORD.—For building house, coach-house, stabling, &c., Idle-road, Bradford. Mr. J. H. Dixon, architect, 90, Heap-lane, Bradford :—

Accepted Tenders.
North, W., Idle, mason.
Kellet, W., Bradford, joiner.
Watson, J. R., Bradford, plumber.
Taylor, A., Eccleshill, plasterer.
Thornton Bros., Otley, slater.
Total of Tenders, £1,115.

DEVONPORT.—For alterations and additions to the Terminus Hotel, Devonport, for the Plymouth Breweries Company, Limited. Mr. Henry G. Luff, A.R.I.B.A., 64, Chapel-street, Devonport, architect :—

Crews, T., Stonehouse	...	...	£716 10 0
Jenkin, T., and Son	...	...	631 8 0
Littleton, W.	...	...	510 0 0
Taylor, T., and Son, Stonehouse	...	...	505 0 0
Greenslade, T., and Son (accepted)	...	...	495 10 0

Rest of Devonport.

EDINBURGH.—For extension of offices of the Local Government Board, Edinburgh, for the Commissioners of H.M. Works and Public Buildings :—

Wishart and Campbell	...	...	£1,557 0 0
Baxter, W.	...	...	1,550 0 0
Beattie, W., and Sons	...	...	1,542 14 3
Sander, J.	...	...	1,470 13 0
Brownlee, R.	...	...	1,427 0 0
Kinnear, Moodie and Co.	...	...	1,400 0 0
Drysdale and Gilmour	...	...	1,388 4 6
Lowrie, J.	...	...	1,385 0 0
Anderson, G., and Son	...	...	1,379 0 0
Mitchell, J., and Son	...	...	1,358 0 0
Bruce, R., and Son	...	...	1,300 0 0
Macandrew, C. (accepted)	...	...	1,288 0 0

ENFIELD.—For building residence, Wellington-road, Bush-hill Park, Enfield, for Mr. M. Buttfield. Mr. T. Potter, architect, Sevenoaks :—

Cordell	...	...	£1,196 0 0
Patman	...	...	1,195 0 0
Fairhead	...	...	1,181 0 0
Brown	...	...	1,178 0 0
White	...	...	1,153 0 0
Morrison	...	...	1,256 0 0
Gogg	...	...	1,224 0 0
Hart, P., West Green and Bush-hill Park (accepted)	...	...	1,120 0 0

METAL CASEMENTS of every description.

GLASS ROOFING

Shelley & Co's & Hopes Patents

HENRY HOPE

55 LIONEL ST. BIRMINGHAM

LONDON, 13, King St. Cheap-side

MAN-CHESTER 8 Exchange Arcade

HARWICH.—For the erection of infant school, boundary walls, w.c.s., &c., at Lower Dovercourt, for the Harwich School Board. Mr. J. W. Start, F.S.I., Colchester, Clacton-on-Sea, and Harwich, architect. Quantities by the architect :—

Girling and Coe, Ipswich	...	...	£1,950 0 0
Dobson, G., Colchester	...	...	1,885 0 0
Smith, Beaumont, and Dawson, Harwich	...	...	1,863 18 0
West, E., Chelmsford	...	...	1,700 0 0
Beaumont, R., Lexden	...	...	1,605 0 0
Moran and Son, Harwich	...	...	1,590 0 0
Saunders, E., Dovercourt (accepted)	...	...	1,477 4 0

Extra for glazed brick dado to lavatory and match-boarded dado to schools, £32 18s. 6d.

HULL.—For building shops, houses, &c., Holderness-road, Hull. Mr. Geo. S. Hird, architect. Quantities by architect :—

Hewitt, Hull	...	...	£1,246 14 8
Hodgson, Hull	...	...	1,052 0 0
Nicholson, Hull	...	...	1,053 17 8
Goates, T., Hull	...	...	1,050 0 0
Harper, Hull	...	...	1,346 0 0
Darney, A. J., and Son, Hull	...	...	1,034 11 0
Sayner, Hull	...	...	1,025 12 0
Scott, Hull	...	...	996 14 6
Hocking & Siggins, Hull	...	...	990 0 0
Colley & Swift, Hull	...	...	982 15 0
Woods, Hull	...	...	944 0 0
Singleton, Hull (accepted)	...	...	903 4 6

ILFORD.—For New Wesleyan Methodist church in the High-street, Ilford, Essex, for the building committee of the same. Mr. J. H. Carte, Upton-park, Essex, architect. Quantities supplied by Mr. Henry Theobald, F.S.I., 48, Finsbury-pavement, E.C. :—

Pappin, J.	...	...	£3,954 0 0
Watson, W.	...	...	3,928 0 0
Sharp, G., Stratford	...	...	3,910 0 0

* Accepted, including certain additional work, at £4,030.

LEYTONSTONE.—For the erection of the Filebrook Livery Stables and Coach-houses, Grove Green-lane, for Mr. James Powell. Mr. J. Williams Dunford, M.S.A., F.I.Inst., rooc, Queen Victoria-street, E.C., architect :—

Coxhead, F. J.	...	...	£1,285 0 0
Fuller and Son	...	...	1,187 0 0
Smith and Co.	...	...	1,167 0 0
Good, E.	...	...	1,086 0 0
Barton, A. G., Walthamstow*	...	...	1,003 0 0

* Accepted.

(Architect's covering estimate, £1,015).

LONDON.—For enlargement of the Clerkenwell Fire Brigade Station, for the County Council :—

Shillitoe, J., and Son	...	...	£8,163 0 0
Thompson and Beveridge	...	...	7,245 0 0
Lough, F., and Co.	...	...	7,194 0 0
Holloway Bros.	...	...	6,857 0 0
Munday, G., and Son	...	...	6,696 0 0

LONDON.—For external painting and repairs required to be done at the Licensed Victuallers' Asylum, Asylum-road, Old Kent-road. Mr. W. F. Potter, architect. Quantities prepared by Mr. C. R. Griffiths, 31, Farnival-street, Holborn, E.C. :—

Collings, W. H., and Co.	...	...	£1,049 0 0
Smith, W.	...	...	821 0 0
Walker, J.	...	...	694 0 0
Dawes, F.	...	...	595 0 0
Pritchard and Renwick	...	...	570 0 0
Hollingsworth, H. H.	...	...	559 0 0
Hayworth, S., and Son, Kingsland*	...	...	497 0 0

* Accepted.

Reading Cases may be had on application to the Manager. Price, 2s. each.

Telegrams—"ETRIDGE, Bethnal Green."

ESTABLISHED 183

J. J. ETRIDGE, JUNR.,

Slate Merchant, Slater and Tiler,
BETHNAL GREEN SLATE WORKS, LONDON, E.

ROOFING SLATES.

In addition to the usual Wharf Stock of about 2000 tons, the undermentioned Cargoes are on the way. Lowest possible Prices for Truck-loads delivered to any Station in England, or alongside in craft.

PENRHYN BANGOR.			PENRHYN BANGOR.			PORT MADOC (Oakeley's)			GERMAN BLUE.		
Ex "Moss Rose."			Ex "Elizabeth Charlotte."			Ex "Three Janes."			Ex "Eastern Belle."		
2,000	1st Blue	24×12	30,000	1st G & W.	24×12	14,000	20×10	Best Meds	8,000	18×9	Best Blue
5,000	do.	18×12	2,000	do.	22×12	22,000	18×10	do.	50,000	16×10	do.
2,000	do.	18×10	4,000	do.	20×12	30,000	18×9	do.	30,000	16×8	do.
4,000	do.	16×12	18,000	do.	20×10	15,000	16×10	do.	10,000	20×10	Best Green
28,000	1st Red	18×12	14,000	do.	18×10	5,000	16×9	do.	5,000	18×10	do.
7,000	do.	16×12	2,000	do.	18×9	20,000	16×8	do.	13,000	16×8	do.
30,000	1st G & W.	24×12	10,000	do.	16×12						
2,000	do.	22×12	7,000	do.	16×10						
4,000	do.	20×12	2,000	do.	16×9						
18,000	do.	20×10	3,000	do.	16×8						
14,000	do.	18×10	2,000	1st Blue	24×12						
2,000	do.	18×9	5,000	do.	18×12						
10,000	do.	16×12	2,000	do.	18×10						
7,000	do.	16×10	4,000	do.	16×12						
2,000	do.	16×9	28,000	1st Red	18×12						
3,000	do.	16×8	7,000	do.	16×12						

Westmoreland and other Descriptions of GREEN SLATES, also ROOFING TILES, supplied only, or fixed by Contract in any part

LONDON.—For alterations and additions to Nos. 187 and 191, and for re-building No. 189, Walworth-road; S.E., for Mr. Hyams. Messrs. Barnes, Williams, Ford and Griffin, architects:—

Pritchard and Renwick	£1,570	0	0
Peacock Bros.	1,548	0	0
Marsland	1,486	0	0
Shepherd	1,482	0	0
Tarrant, F.	1,460	0	0
Jarvis and Sons	1,429	0	0
White, A., and Co.	1,419	0	0

PETERBOROUGH.—For the erection of two dwelling-houses Bamber-street. Mr. J. G. Stallebrass, architect, North-street Peterborough:—

Bridgefoot	£500	0	0
Watson and Spriggs	498	0	0
Jellings	479	0	0
Bailey	470	0	0
Gray	469	0	0
Cracknell	449	10	0
Sibley	442	0	0
Wenlock	420	0	0
Guttridge (accepted)	415	0	0
Pape	405	0	0

(All of Peterborough.)

ROMFORD.—For the pulling down and the re-building of the Coach and Bell Inn, High-street, Romford, for Messrs. Goodchild Brothers. Mr. Arthur T. G. Woods, M.S.A., architect:—

Dowsing and Davis, Romford	£2,155	0	0
Rogers and Robson, Brentwood	2,105	0	0
Hammond, J. S., and Sons, Romford (accepted)	2,065	0	0

(Architect's estimate, £2,210.)

STRATFORD.—For erection of a block of school buildings to be known as Water Lane Schools, on a site at Stratford, for the West Ham School Board. Messrs. J. T. Newman and Jacques, architects, 2, Fen-court, Fenchurch-street, E.C.:—

Potter, J., Horsham	£22,765	0	0
Stimpson and Co., Brompton-road	19,900	0	0
Carter, H. J., Grays	19,218	0	0
Hill, C. G., Coventry	18,880	0	0
Lorden and Son, Upper Tooting	18,489	0	0
Hearle and Farrow, London	18,125	0	0
Reed and Son, Stratford	17,996	0	0
Girling and Coe, Ipswich	17,841	0	0
Maddison, W. J., Canning Town	17,534	0	0
Gregar and Son, Stratford	17,320	0	0
Kirk, Knight and Co., Sleaford	17,100	0	0

(* Accepted.)

LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

SHEFFIELD.—For additional court, magistrates' room, waiting-rooms, offices and cells, between Waingate and Castle Green, Sheffield, for the Watch Committee. Messrs. Flockton and Gibbs, architects, 15, St. James's-row, Sheffield:—

Whole Tenders.

Morton, J.	£16,917	0	0
Lowe, T., and Sons, Burton-on-Trent	16,800	0	0
Longden, G., and Son	16,200	0	0
Ives, F., Shipley	15,938	0	0
Ash, Son and Biggin	15,780	0	0

Accepted Tenders.

Fidler, J., Eckington, mason	£8,895	0	0
Lillevier, J. H., joiner	4,105	12	0
Corrie, J. B., and Sons, plumber	1,120	10	0
Carter, Bros. and Co., Manchester, ironfounder	788	0	0
Chadwick, C., and Son, plasterer and slater	375	0	0

COMPETITIONS.

NEW SCHOOLS, WHITWELL, CHESTERFIELD.

DESIGNS invited at once for complete Set of Schools (Boys', Girls', and Infants), with residences. Remuneration for successful competitor only. Applications for particulars to be sent in to the Secretary (GEORGE WALKER, Esq., Whitwell, Chesterfield), before April 8, 1895

ARCHITECTURAL COMPETITION.
ABERGAVENNY INTERMEDIATE SCHOOL FOR GIRLS.

The Managers of the above School are desirous of receiving from Architects, DESIGNS, SPECIFICATIONS, and ESTIMATES for the ERECTION, at a cost not exceeding £1,000 of DAY SCHOOL BUILDINGS, at Abergavenny, for the accommodation of 60 girls, planned with a view to convenient extension, the estimated cost not to include architect's fees or school furniture.

A plan of the site may be obtained on application to the Clerk on payment of One guinea, which sum will be returned on receipt of Bonâ-fide Designs.

The Managers do not bind themselves to carry out any plan submitted.

It is, however, intended that the architect whose plans are accepted by the Board be appointed Architect, provided that the Tenders approximate the estimates.

The Designs are to be sent to the Clerk under non-deplume, to be accompanied with the name and address of the competitor in sealed envelope, not later than THURSDAY, the 11th day of APRIL, 1895.

ABERGAVENNY, FRED. BAKER GABB, Clerk,
March, 1895.

TWICKENHAM.—For repairs and decorations to Poulett Lodge, Cross Depe, Twickenham, for Mr. P. B. Burgoyne. Mr. Walter J. Ebbetts, F.R.L.B.A., Savoy-house, 115, Strand, W.C., architect:—

Foord and Sons, Brentford (accepted)	£873	15	0
For internal sanitary works:—			
Foord and Sons, Brentford (accepted)	125	12	0
For external sanitary works:—			
Foord and Sons, Brentford (accepted)	191	0	0

ALEXR. GILCHRIST,
Brassfounder,

27, EGLINTON STREET,
GLASGOW,

Makes a Specialty of all kinds of Granolithic or Concrete

BRASS PAVEMENT
ROLLERS
and NAME-PLATES.

Special Machinery
for their Manufacture.

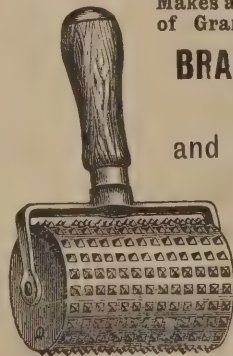
Stable Rollers and Grooves.

Hand Stamps, Border Rollers & Crimpers.

PAVEMENT NAME PLATES, any Name & Size,

Suitable for Builders, Contractors, Plasterers, and Concrete Workers.

SEND FOR ILLUSTRATED LIST,



The Builders' Journal.

Vol. I., No. 8.

Tues., April 2, 1895.

ILLUSTRATIONS.

Entrance to Humewood, Co. Wicklow	113	Portrait of Mr. James Brooks	120
A Portrait of Mr. Edwin O. Sachs.....	115	Worth Church, Kent, by Mr. James Brooks.....	120
Collapse of a Wrought Iron Stanchion	115	Tower Charlton Church, Dover, Mr. James Brooks,	
An Entrance to the Palace, Shaftesbury Circus	117	Architect	121
A Corner in the Palace	119	Ploxtole Church, Kent	123

CONTENTS.

Ashes—and Sackcloth	113	"On Fire!"—		Specifications: From both Points of View	123
John Jerry!	113	A Chat with Mr. Edwin O. Sachs	115	How to obtain Acoustic Success	126
Labour and Learning	114	Bricks and Mortar	116	Sheffield Silver Plate	126
Does Honesty Pay?	114	The Builders' Journal Competitions	120	Trade and Commerce	127
"Iron and Brass".....	114	Men who Build, No. 8—Mr. James Brooks	120	Correspondence	127
				Society Meetings	128

The Builders' Journal.

Ashes—and Sackcloth. If it be true that the straw shows how the wind blows, then the Birmingham Corporation Water Department is in the position of the drowning man. We have mixed two old metaphors intentionally, because water has become a muddling business, and any Water Company or Corporation "going under" is a happy sight just now. A small property owner, named Thompson, sued the Water Department for £2 is., cost of renewing certain lead pipes laid by them to his order for the water supply of certain premises belonging to him in Small Heath. The pipes should have lasted (according to the rules laid down by Tradition) forty or fifty years, but, as a matter of fact, they "expired" when eighteen months old. There was a leakage so long ago as last June. Evidently the pipes were anticipating our recent severe winter. When the pipes were exposed, Thompson found that in order to comply with the requirements of the Department it would be necessary to relay the whole of them from the main to the stop-tap. The pipe had simply been put down in a road composed of ashes, and had corroded. A wise Water Company would have given the pipe a "coating" of some kind. And so this "case" in the County Court: Was plaintiff responsible for renewal or defendants liable for work improperly done? Of course the defence was that the pipes had been well and properly laid, and that the premature corrosion of the lead was due to the action of chemical constituents in the ashes which the Corporation officials could not know of. Corporations, in these matters, remind us of the lily white hen that never "laid astray." For the plaintiff, witnesses testified that lead pipes ought not to be laid in chemical ashes without protection. The Corporation called witnesses to prove that every precaution had been taken, that the road was not of their making, that they had no reason to suppose there was anything deleterious in the ashes. The Corporation officials admitted that pipes such as the plaintiff had ordered ought to last fifty years. There was no reason why they

should have deteriorated so rapidly, unless there were some noxious constituents in the ashes in which they were embedded. Judge Chalmers was not to be taken with chaff—or ashes. He remarked that the question was one of fact. Had the pipe been properly laid or not? There was a conflict of evidence on the part of the experts as to the effect of ordinary ashes, but it was admitted that chemical ashes were injurious, and the ashes



ENTRANCE TO HUMEWOOD, CO. WICKLOW: BY MR. JAMES BROOKS.

in this case were unquestionably chemical ashes, as the Water Department might and ought to have ascertained at the time. Under the circumstance he thought the Corporation were liable for the damage to the pipes, and a verdict must be given for the necessary repairs, which were estimated at 38s., and costs. We would suggest sackcloth and ashes as appropriate to the Birmingham Water Department just now.

John Jerry! OUR old friend Jerry still bears us company. At an inquest, in Wolverhampton, on the body of a boy who was killed last week by a chimney crashing through the roof of the house in which he resided, the borough surveyor mentioned that the gale on the previous Sunday had caused damage to the extent of £15,000 in the town. The jury, in returning a verdict, recommended the Corporation to prevent the erection and occupation of jerry-built houses. This recommendation by the twelve enlightened jurymen of Wolverhampton is a nasty joke for the Corporation, but imagine for a moment the need for such a thing! Perhaps the coroner forwarded the jury's suggestion in due course to the corporate body, and, perhaps the corporate body, steeped to the lips as it may be with jerry interests, turned up its nose at the jury, and pitched the recommendation into the fire. These silly verdicts of half-hearted jurymen are quite useless, and all the Building Acts and bye-laws in the land are powerless to stop imperfect work. It is quite easy to exterminate the genus Jerry; not by rules and exactions, not by bye-laws and borough surveyors, not by penalties and sanitary inspectors. Jerry-building can be stopped—not altogether, nor suddenly—by altering the tenure of land, and then Master John will no longer be able to commence a building estate on a capital of eighteenpence and a sparkling record of judgment summonses. It is idle to think that jerry-building is less practised in the country than it was five-and-twenty years ago. It is as rampant, as evident, as barefaced. It is smuggled in under "art" decorations, which to a sensitive soul makes the horror ten times worse. One thing, however, is refreshing to announce, that Master John Jerry has almost entirely shifted his abode from London. District surveyors are more conscientious than their brethren of the country. They are altogether a more able class of men, and there is no opportunity for them to get on a footing of acquaintance with their building visitors. But, in the country, matters are distinctly different, and Master Jerry is generally master of the Local Board Surveyor and half-a-dozen of the councillors, and a box of indifferent cigars will buy up all the

requirements of the Urban Sanitary authorities, much as a butcher buys up copies of *The Times* to wrap up his New Zealand mutton. But—and let us have a but in the case—the Leasehold Enfranchisement Association, who can count upon our strongest support, without, however, an atom of political feeling, will one day win, and then good-bye to our old friend. We fancy he is grey haired already.

Labour and Learning.

EVERY now and then there springs up a New Cult, and it is the habit of a Cult to demand a roof for its head. Nothing can be done, now-a-days, without a "Hall." This is good for the architect and builder, who, a little while ago, had begun to fear that all the big buildings had been built. But every town is to have its Toynbee Hall, and there will now be scope, as may be imagined, for some architecture and much ornamentation. The London Toynbee Hall workers are determined upon spreading their gospel throughout the country, and at present they are propagating their principles in Manchester and Liverpool, with much success. Canon Barnett, who is a Warden of Toynbeeism, and Sir John Gorst, who plays the rôle—and plays it very well—of Our Mutual Friend, have stormed Manchester and found that city willing. Owens College is eager, and Ancoats is the suggested "area" for settlement. Active Toynbee workers hold—and rightly hold, we think—that the day of dilettante interest from the superior suburbs has gone by. People must go to the poor if the poor have to be brought to the surface. And anyone at all conversant with Ancoats, Manchester, will know what this means. It means sacrifice, surrender, and self-denial. A Manchester contemporary asserts that to live in Ancoats is by several degrees less wholesome than to live in Whitechapel. We are not prepared to dispute that, though we have our doubts, but comparisons in "Whitechapels" are odorous as well as odious. The germ of the Toynbee idea is good; is honest; is an aspect of what may be termed—for want of a better definition—Christian Socialism. That dense populations should live together like swine, breathing the abominable air of courts and alleys, living amid surroundings that even contaminate children, growing up and growing old under conditions that diminish the vitality of the race, is the black blot upon our vaunted civilization. In no savagery in the World is such uncleanness. The object of these Toynbee Halls is to arouse a healthy—as distinguished from a merely political—discontent. We believe in the healthy discontent. It is the secret of advancement in Progress, in Commerce, in Science, Literature, and the Arts. What would our Architecture be to-day if it had not been for the healthy discontent of a few? University men and women settling down in Ancoats—or elsewhere—will introduce a little of the sweetness and light of life, will voice the *Vox Populi* better than either fanatics or faddists. Only they must be vigorous-brained, clear-seeing and large-hearted men and women. Sir John Gorst's description of the ideal Toynbee Hall as the meeting place of "learning and labour" is sound. Not to the political panaceas of the day, nor to the catch-penny schemes of picturesque propagandists, should Labour look for help while Learning stands despised. Labour still needs educating, needs learning, and we are not afraid, like some of our daily contemporaries, to say this. All thinking men—be they workers or employers—came to this conclusion long ago.

Does Honesty Pay?

A BIG issue seemed to be raised by a pathetic little incident last week. Big issues have a habit of springing from small begin-

nings, but the larger ethics we can well leave alone for the moment. A poorly-clad working woman picked up a small leather bag from the pavement in Long lane, Smithfield. She opened it and saw that it contained papers and gold—£500 in all. She did not get excited, nor did she spend any of the money. She simply told "some people" about it, and said she would take it to the police station. Presently the owner of the bag and its contents hurried up, alarmed at his loss; he described the cheques satisfactorily; he got his bag and his money. This man had a small "bump" of gratitude, and no soul. He could lose £500 without falling ill, but to part with five-shillings would have killed him. He rewarded the working woman with *one penny*! It was a gross piece of extravagance, but was not Honesty Rewarded? Fortunately the old school copy books say: *Honesty is its own reward.*

"IRON AND BRASS."

By MR. J. W. SINGER.

[Concluding Extracts from a Paper read before the Architectural Association.]

BRASS is very tenacious, but it has this defect, that if the tension is continued, a singular molecule change takes place, rendering it rotten and most unfitted to support any heavy weight. This fact was evidently known to the brass workers of the sixteenth and seventeenth century, for it will be noticed that they never used brass to suspend the large brass chandeliers made about that date, and so often seen in our churches, but invariably used iron rods. It has been said by an authority that every brass pendant hung by means of brass supports will drop within fifty years. This may be an exaggeration, but brass is not a suitable material for the support of any heavy object. Brass is the metal in which a very large proportion of what is known as objects of applied art are now produced, bronze being retained for fine art. And to bring it into suitable shapes, brass is cast, drawn into round wire, flat strips, hollow tubes, and rolled into sheets, and in these various forms easily lends itself to the manipulation of the workman. Now, just to refer to the long series of operations through which this metal passes in its many different modes of treatment. Thus in a molten state it is cast into suitable forms moulded in sand. The model from which the mould is made may be either carved in wood or modelled in clay. The castings, according to their shape and the object for which they are required, are either turned in a lathe, or are chased. Brass is also beaten into forms or embossed, bent into scrolls of various kinds, when in the shape of strip brass, and also there is the large sub-division of engraved work. Mention should also be made of the process known as spinning. The form of the object that is to be spun is first made in either hard wood, or if a great number of the article is required, it is made in metal. This form, which is termed a chuck, is put in a lathe, and against it is fixed a brass disc. The lathe is then put into rapid motion, and various steel tools of different shapes pressed with considerable force against the disc, beginning in the centre, and gradually working outwards as the metal yields to the pressure, and takes the form of the model. It is a very interesting process, and astonishing how quickly a good workman can spin a number of forms, which, if they had to be hammered up, would entail much time and labour. Brass is also used for repoussé work, and this process, is, perhaps, the one that requires the most highly skilled and artistic treatment of any through which the metal passes. It is not quite such a suitable metal for this pur-

pose as copper, as it is not so soft, and cannot be stretched so easily without cracking, but this method of execution has been, and is still, very generally employed for converting this metal into ornamental forms—the processional crosses on the table being interesting examples of the application of repoussé work. After brass has been treated in one or other of these processes, it is either polished or dipped in an acid solution and burnished, to give the metal its bright yellow colour, with which we are so well accustomed. As brass cannot be welded like iron, another mode of attaching the various parts of a piece of work has to be adopted, and, as may be imagined from the general use of this metal for the manufacture of ornamental forms, this process, which is known as soldering, is not a difficult one. The two surfaces are united by the application of sufficient heat to melt a more fusible and baser metal which is introduced between them, and which combines with both, and firmly unites the two parts. It will thus be seen that many industries throughout the country are the result of the many processes through which this metal passes, before it comes before us in the form of, say, a lectern, or an altar-cross for our church, a gas-bracket, or an electrolier to light our room, a door handle, or a fender; and, perhaps, no metal has a more universal application, as it is used for almost every form of ornament needed in metal for either ecclesiastical or domestic purposes. It is a question if it would not be desirable to make a larger use of bronze in preference to brass. I confess that for many purposes I consider the former the best metal. Thus, for work in churches, I think bronze the better material of the two. It is more durable, of a richer shade, and it retains its colour much better, as brass so easily tarnishes, on account of the zinc in its composition, and the difference between the cost of the two metals is really little; in fact, our firm is always willing to supply bronze at nearly the same price as may be quoted for brass. I believe in the future bronze will be much more generally used than it has been in the past. The application of brass to architecture is not quite so direct as in the case of iron; as brass, being cleaner to handle, and no doubt also because of its colour, and the facility of its manufacture, is more often used for movable pieces of furniture, such as lecterns, candlesticks, crosses, vases, and numerous articles in daily use. It is now recognised, however, that even a piece of furniture has its influence upon a building, and deserves and repays the architect's attention. It is admitted at the present day, however it may have been a few years ago, that it is hardly expedient to turn the architect out of the house as soon as the four walls are built. England is, perhaps, not so rich as some countries in examples of old brass work, but there is a certain dignity of style about such as we have—for instance, the old brasses and lecterns, which have been revived with some success.

IMPORTANT deposits of amianthus have been discovered in the Grand Cañon of Colorado, about 75 miles north of Flagstaff. Amianthus is a finer sort of asbestos. It splits into long, flexible whitish-grey filaments, hence it is sometimes called earth-flax. It can be woven into cloth or paper together with flax, which may afterwards be removed by heat. Amianthus is incombustible; it is used for lamp wicks and filling gas grates, where its fibres glow with the soft radiance of a clear coal fire without being consumed. The prevalent employment of gas stoves will create a greater demand for it in commerce.

THE new infants' Sunday School buildings attached to Burlington Chapel, Ipswich, which have cost £1,400, were opened last week. Messrs. Eade & Johns, of Ipswich, were the architects, and Mr. Edgar Catchpole, of the same town, was the contractor.

"ON FIRE!"

A CHAT WITH MR. EDWIN O. SACHS.

THE recent controversy on concrete and its resistance—or otherwise—to fire, suggested that Mr. Sachs, who has been a practical fireman on the Continent, would be a likely man for ideas. When we had talked for half-an-hour there seemed to be more ideas than we knew what to do with, but this was, of course, Mr. Sachs' fault. He was just back from the Continent, and the



Continent is to the architect what fresh air is to the ordinary individual. So that I digged in fertile soil.

A lofty office—architects dwell so near the gods!—in Waterloo Place revealed Edwin Sachs—who is still a young man with a fear of worse—behind a green baize door. He was prepared, by document, and pamphlet and paper, to prove that he knew something about fire, but I waived these for the moment and attacked him in his early years. He has a boyish look still, although he asserts that three thousand and odd fires have shortened his life—burning the candle at both ends.

"Oh, I am an Englishman" (and I think his portrait proves it), "and was born in London; educated (after a respectable lapse of years) at University College. Then I went to Germany, where I studied architecture and had a practical training, being a Government pupil engaged upon the edifice designed for the Imperial Law Courts. I gained further experience in the Berlin Royal Technical Schools. Then I was with Messrs. Ende and Boeckmann, of Berlin, who were the architects for the Japanese Imperial Parliament Houses in Tokio. Oh? Yes, I came into close contact with the Japs and found them remarkably clever fellows; quick to learn and persistently persevering. An odd thing about the Jap is his adaptability. In Germany, he is a German; in England, an Englishman."

"Tell me the best continental country for the architectural student?"

"Well, I should say in the following order, and I know well the whole of Central and Northern Europe:—South Germany, North France, Cairo, and Russia. I have not been to Spain. In South Germany the student will pick up hints for Renaissance; in North France, here and there little Gothic suggestions that may happen to be practical and inexpensive; while in Egypt and Russia he will gain an idea of colour. No one can comprehend the effect of colour in architecture, unless he has been to Egypt or the East."

"Of yourself as fireman?"

"I became a 'ranker' under the German Home Office, in the Royal Police Fire

Brigade, Berlin, ultimately obtaining an Ensign's commission and serving one year. For six weeks at a time I never had my boots off. It was terribly hard work, but the practical experience was invaluable; I attended three thousand fires. The Berlin fire system is one based upon absolute theory. It is all theory, and I think theory can go too far. I divide fire Protection under three heads: Fire Prevention, Fire Combating and Fire Research. In matters of research, the Germans are first-rate, but in combating their firemen lack ready resource. It is not always possible to work on a scientific basis, and then is the time for a little happy-go-lucky rule of thumb. After I had ended my connection with the Berlin brigade, I went to Vienna and became a supernumerary officer in the fire brigade of that city. The Viennese system seems to me the nearest perfection. It is a good half-way house between absolute theory and happy-go-lucky practice."

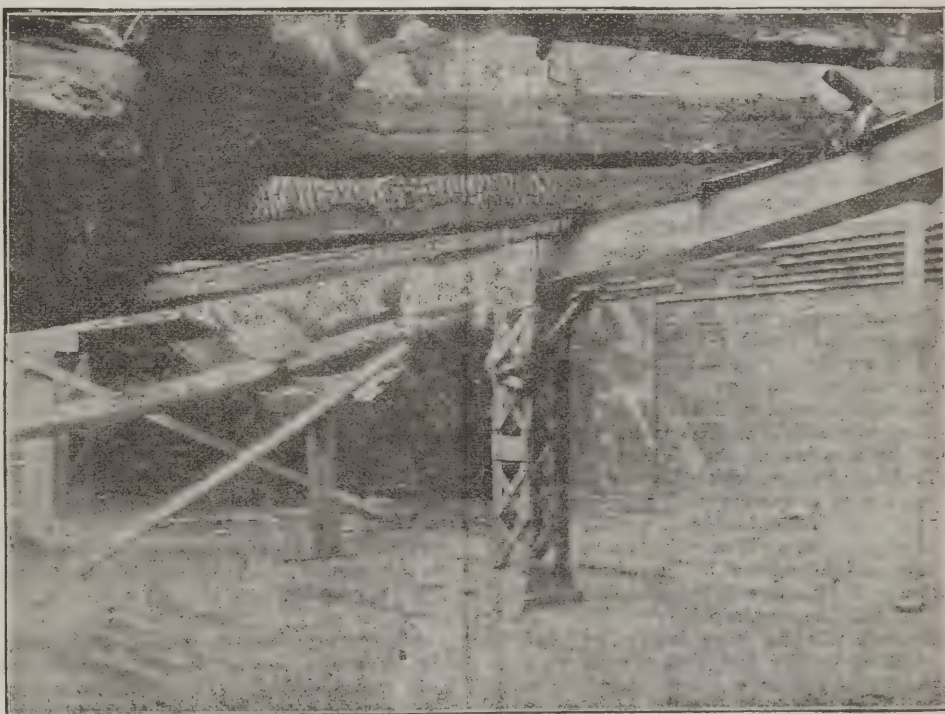
"Take London. In London there is very little theory and much 'practice.' Even the New Building Act does not mark any great advancement; there is not enough division of risks—partitioning—and huge blocks are intermingled. Little is attempted in the way of fire prevention. In 'combating' there is a serious deficiency in fire alarms, nor can sufficient men be concentrated in a short space of time upon any given spot. For instance, the 'first batch' on the spot, in Berlin, numbers 28 men; in London, only four men. More stations! More men! is my cry. Why, that great authority, Sir E. M. Shaw complained so long ago as 1872 of an insufficiency of men, and we have to-day one hundred less than he suggested as necessary. Berlin—and remember how much smaller the City—has 800. No, I do not believe in kid-glove volunteers, but I think that a trained Reserve Force would be valuable, inasmuch that it would be there to fall back upon. These

galleries, wide passages, straight stairs and unimpeded exits are sure guarantees for safety, of whatever material composed. Protection of property is another matter. Perhaps a theatre manager might not thank you for saving his theatre! And then this question of concrete. Concrete, grown hot, becomes brittle and breaks, while wrought iron columns collapse. Look at this photograph showing the effect of a recent fire at Hamburg. You will see that one section of the wrought iron stanchion has simply crumpled up, letting the floor of the gallery down. A cast iron column would not have done that. Wrought iron, so far from being a source of strength in case of fire, is in reality a source of weakness. It helps to drag the concrete down."

"And why are our theatres so small, compared to those upon the Continent?"

"A simple answer. The theatre abroad is the assembly hall, the reception room, and the playhouse in one. There, men go to meet each other, take their friends, fraternise, pass round the gossip of the town. In England, the theatre is an accessory—abroad, a necessity. I would not go to the length of advocating state-provided theatres in England, but I think municipal subscription theatres would be appreciated, with stock companies and regular organisation. The difficulty would be to get public spirited men to endow them."

And then we fell upon controversy, for I had my doubts of the monied men "founding" theatres—save as a commercial investment. And from this we drifted to discuss other matters, Mr. Sachs bringing forth a batch of drawings intended for the handsome volumes he is preparing, in conjunction with Mr. Ernest Woodrow, A.R.I.B.A., dealing with "Modern Opera Houses and Theatres." Mr. Sachs is one of the Foreign Secretaries of the National Fire Brigades Union, and has just been appointed statistical officer on theatre fires



COLLAPSE OF A WROUGHT IRON STANCHION.

Reserves should, of course, live near the stations of call."

"But the men?"

"Oh, Englishmen! and English fire appliances too. Our engines are absolutely the best in the World. Then, with regard to fires in theatres: do you know it is quite possible to have a perfectly 'safe' theatre, so far as immunity from loss of life is concerned, with wood galleries and floors; wide, straight

to the German authorities. It may interest the Insurance Companies to know that particulars of 11,000 fires have already been collected, and herein should be much wisdom. Fire is a subject that Mr. Sachs has also handled in certain flame-coloured pamphlets.

Mr. Sachs, in spite of his experience, is quite willing to build theatres for those that want them. This may read like something of a riddle, but it is only a business paradox.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
2nd April, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

In any respectable dictionary, but more especially in Webster's, a conservatory is defined as a "green-house for exotics often attached to a dwelling-house as an ornament." From their contention in the City of London Court, the East London Water Company appear to consider this definition lacking in elasticity. As a matter of principle only—for in the particular case they had, "out of grace," ceased to levy the assessment—the company were ready to argue that a small glazed lobby leading to the smoking room of a suburban villa and decorated with a few despondent plants in pots, was liable to an extra water rate of 5s. as a "conservatory." It was true the lobby was entirely innocent of a water supply. But when a London water company has a principle to maintain, and begins to draw on its reserves of statutory authority, the hapless ratepayer might as well climb down or sit as desolate as a greenhouse geranium. Presently the companies will charge—like the barbers—for a shampoo.

ALREADY the National Gallery of British Art, which is in course of construction upon the site of the old Millbank Penitentiary, promises to be one of the finest buildings upon the banks of the Thames. Impeded by the recent frost, the workmen had to abandon their tasks for an appreciable period, but, in spite of this, it is confidently believed that the undertaking will be carried out within the contract period; and in a few months there will be completed one of the largest and best-appointed buildings in the kingdom devoted entirely to British art. Something like a burden will be lifted from the shoulders of the trustees of the National Gallery in Trafalgar Square, which has now for several years been so overcrowded with pictures as to render it impossible to expose them all to public view, even with the use of the much-abused screens. The architecture of the new structure is massive, but without that dull and unimposing solidity which characterises the older institution; and, in addition to the fact that the new gallery overlooks the river, there are to be no buildings attached directly to it on either side, so that an uninterrupted view of the architectural decorations can be obtained on three sides of the site. The chief piece of decorative work within the gallery will be in the large octagonal entrance hall, from which the picture-rooms will be approached.

TECHNICAL education and instruction are making headway. Darlington finds its old school not big enough, and it proposes to borrow £8,000 for the purpose of a new technical instruction building. The total cost will be from £15,000 to £16,000, but

there will be a contribution from the Durham County Council of £2,250, and from the South Kensington grant £1,000, while subscriptions are promised of £1,095. There is in addition a surplus from a penny rate for technical instruction which has been levied for three years.

THE report upon the series of explosions which occurred on Southwark Bridge, on February 1st, has been issued by Major Cardew, electrical inspector to the Board of Trade. In these outbreaks it appears to be uncertain whether the gas was fired by electricity or by the introduction of a match which might have been thrown down by a passer-by, and Major Cardew reports that the most striking features of the accident are: (1) The distance to which it appears that a series of explosions may travel along the electric mains, which form a gigantic network under the whole of the streets of the City; and (2) the proof afforded of the insufficiency of any ordinary system of ventilation of the pipes and electric street-boxes, if gas can find an easy access to them. The inspector urges the Board of Trade to call upon the City of London Electric Lighting Company to take the necessary precautions required by the Board.

ALREADY Paris is busying herself with the forthcoming Universal Exhibition. M. Alexandre Dumas fils, M. Sardou, and M. Jules Claretie, manager of the Comédie Française, have met to discuss theatrical plans. It is proposed to construct a play-house as near the Champs Elysées as possible, for representations to be given by French or foreign companies. Side theatres will also probably be erected at different points of the Exhibition, chiefly for historic revivals or reproductions, but no definite resolutions were arrived at, only preliminary arrangements being sketched out by the directors, who will hereafter come to a decision on the subjects discussed. The organisers of the Exhibition also intend to concert measures for the maintenance of the *status quo* as regards the Palais de l'Industrie during the progress of the works. The artists and sculptors were afraid that they were about to be ousted from that construction, but it is possible that the annual Salon of the Champs Elysées, as well as the minor and incidental exhibitions of the year, will continue to be held as usual in the Palais de l'Industrie.

CANON AINGER will shortly make his advent to the Master's House in the Temple, the preparation of which has been in progress for four months and is still going on, the expense being borne by the Middle Temple. The improvements include a new system of drainage, and the fine old house has been taken in hand from top to bottom. Canon Ainger, whom all lovers of Charles Lamb have cause to admire, will find it no easy task to succeed so eminent a Master of the Temple as Dr. Vaughan, but he is very popular with the bar.

ARCHITECTURALLY the houses in Armenia are extremely simple; four stone walls are built above the surface of the ground and are covered over with a flat roof of earth, which is rolled until it becomes rain-proof. On this roof they hang their clothes to dry, walk about in fine weather when the streets are changed into morasses, turn out their children to play, and spread their shakedown for the entire family in hot weather. The floors of the rooms are likewise of hardened earth, on which all the inmates of the house enjoy sleep. The more affluent peasants have a plain wooden divan, on which, when it is covered with rugs and carpets, they pass their long winter nights. In Dalori, or Dalvori, which played a very important yet

absolutely passive rôle in the recent butchery, in Psank, Berm, and some other places, the houses differ from those of the rest of Sassoon, and are in all respects identical with the dwellings of the Kurds. Thus they have two stories instead of one, the upper half being termed *Keshk* (a Turkish word). The *Keshk* has very large windows in each of the four walls; but, for pressing purposes of defence, under each window lies a pile of big cut stones, specially prepared for blocking up the aperture so completely that only two or three narrow openings are left through which the flint-lock may empty its contents with effect.

THE spring exhibition at the Walker Art Gallery, Liverpool, has novelty. A considerable amount of space is devoted to works in black and white and architectural designs, and various branches of decorative art are illustrated more or less adequately. Nearly four hundred water-colour drawings occupy two of the rooms; and among the remaining exhibits are some oil paintings and photographs. Nearly all the leading illustrators are represented in the black and white room, among the contributors being Sir John Gilbert, Mr. Phil May, Mr. Greiffenhagen, Mr. Raven Hill, Mr. Pennell, and Mr. R. Anning Bell.

THE description of the discoveries made at Pompeii during the recent excavations, has been published. It shows that enormous buildings have been unearthed, of great beauty and solidity in architecture, with perfect drainage, and with the fullest provisions for health and comfort. The buildings contain thirty or forty immensely spacious apartments on the first floor, and as many on the second. The rooms looked out on a rotunda nearly forty feet long. Courts, surrounded by columns, surrounded the bedrooms, which opened upon large ornamental gardens with fountains. Suites of rooms were built upon the flat plan of modern times, while the ventilating machinery was in every way perfect. One of the most interesting discoveries made was that of a bathroom, which was unearthed on a property belonging to Signor de Proseo. This bathroom was furnished with large sculptured marble basins, heating apparatus, lead plumbing work, with bronze faucets, and tiled floors and walls. It was arranged with the usual hot, tepid and cold sections. It has been so well preserved because the roof did not cave in during the great eruption of Vesuvius which buried the city of Pompeii in the year 79. Most of the houses were entirely destroyed at that time, only a few vaulted structures resisting the immense pressure of the lava and ashes.

At the recent Sheffield Art Crafts Exhibition, a piece of repoussé work, in the form of a shield adapted for billiard tournaments, caused much admiration. It consisted of a polished oak back, with sterling silver and electro gilded and oxidized mountings. The centre of the shield was an oxidized plaque, showing billiard players at play, with the accustomed raised seats containing a few spectators, interested more or less in the match. A plaque in the centre was set in a gilded mount, composed of oak leaves in the form of a wreath, and in bold relief at the top of the shield was a coloured ribbon and band to bear the name of the club. Round the sides of the shield were eleven sterling silver medallions to carry the names of the winners in the different tournaments. The work was designed by Mr. T. Swaffield Brown, of Messrs. William Hutton & Sons.

THE last lecture of the series on Cathedrals was given at Toynbee Hall by the Rev. Vicars Boyle. No English cathedral, he said, approached Lichfield in the rich magni-

fience of its West Front, which we owed to Bishop Roger Longepée, a foreigner who could not speak English, and who was an absentee for many years. The lovely doorways and the grouping of the three graceful spires gave to Lichfield a distinctive beauty. Its library contained unique treasures, among them the gospels of St. Chad.

THE National Portrait Gallery, which has been built from designs by the late Mr. Ewan Christian at the back of the National Gallery, is now completed and furnished, but will not, it is stated, be handed over to the Government until the end of next month, as a large hoist lift is in process of erection. The building is an adaptation of the Florentine style of the sixteenth century. Mr. Alexander, the original donor, has contributed £80,000 towards the total cost of £96,000, and the Government the remainder. After the pictures have been moved in, there will be a public opening ceremony.

A PASSAGE in the speech by Sir Edward Clarke, Ex-solicitor General, on the "Welsh Disestablishment Bill," is worth reading. "Take the cathedral of Llandaff," he said. "Forty years ago that cathedral was practically a ruin. The nave was grass-grown, the ivy climbed, and birds built their nests in its roofless and windowless walls, and at the end of it there was a small choir, shut in by an imitation Italian facade. There was a scanty congregation, a poor and meagre service, and a choir in which no anthem had been sung for 200 years. What is the state of things now? During those forty years that church has gained beauty and strength, and it is now one of the finest of Christian temples in Wales. There is a spacious nave, the church furniture is of the best, but the best furniture there is in the men who are ministering the work of the Church and the great congregations that come in to join in the service of prayer and praise. That is a Church that is to be taken away, as if it was not a national monument, and the Church in Wales is to be told that it has no Cathedral of its own, but is, by permission of three Welsh Commissioners, merely to be allowed to celebrate service there."

THE Exhibition of the Royal Society of British Artists is less interesting than even a moderate enthusiasm would have led us to expect. Several of the most able members of the Society contribute nothing. Others are fairly well represented, and there are a few good works by artists who have not yet acquired any wide reputation. Mr. Bertram Priestman has a large picture of dismantled ships under a stormy sunset sky: "Condemned"; and M. Julius Olsson shows an advance on his previous work, in a delicately-toned and exquisite sea coast view, "The Waning Moon." Turning to more architectural subjects, an interior of "Chartres Cathedral," by the President, Mr. Wyke Bayliss, has all the distinguishing qualities of his work; but the smaller view, "In the Church of St. Lorenz, Nuremberg," while quite as accurate in design, is broader in style, and more impressive. The Exhibition is, on the whole, disappointing.

It is to be feared that the injuries done to the noblest ruin in the World by the recent

earthquakes in Greece are more serious than was at first supposed. The Parthenon, it is stated, is in great danger, and it may have to be handed over to the tender mercies of the "restorer." No monument of antiquity is at once so beautiful and so dignified as the great temple on the Acropolis of Athens, which, in spite of the storms of centuries and the more cruel devastations of successive wars, still gives a more adequate idea of the wonderful creative powers of the Greek architects than any other existing building. It is satisfactory, however, to know that nothing will be done without the gravest consideration. A careful investigation undertaken by a commission of inquiry which included several distinguished foreign architects has made it clear that extensive repairs are absolutely necessary to prevent the destruction of the western portico, but the Greek Government have summoned Professor Durm, of Karlsruhe, to make a further examination and

to be offered to the proposal, which, on the other hand, has the support of the teetotalers and the purity party. It is contended that the provision is absurd, would be impracticable and harassing, and would not improve the morality and decorum of the town, but would interfere with the liberty and enjoyment of the summer visitors. The promoters of the clause claim it would have a tendency to enhance the order of Douglas as a watering-place. There is to be a strong fight over the proposal, which is developing an agitation in the town. The public "palaces" with which Douglas abounds would certainly suffer under this provision—particularly in the pecuniary sense.

A poll of the Trustees of the Royal Infirmary, Manchester, has resulted in a confirmation of the decision taken at the special meeting in February, when the plan for extending the Infirmary laterally towards Portland-street and Mosley-street was rejected. Even in the

face of the strongly expressed opinion of the Board of Management, it was scarcely possible that the Trustees should accept this plan after passing, in 1892, a resolution adverse to any scheme of extension which, like this one, would encroach on the open space now surrounding the building. Now that the extension scheme is disposed of, it may be expected that the alternative of retaining the present building as a central hospital and supplementing its accommodation by the use of additional buildings in the suburbs will be pushed to the front. An argument in favour of this course is to be found in the straightforward answer of Messrs. Young & Hall to an invitation to send in plans for the extension of the present building. "We are forced to the conclusion," these architects wrote, "that under no circumstances should the required accommodation be given upon the present site by adding to the present buildings. Upon public grounds also, we are strongly of opinion that the space which exists around the Infirmary buildings should be preserved for the good of the patients and the public considering the crowded condition of the city. The alternative is to pull down the entire buildings, except the out-patients' department and the nurses' home, and to erect an entirely new hospital, upon the present site. If this were done the same number of beds could not possibly be accommodated as now are." The main question now is—whether it is

better to persist in the hope of providing on the present central site all the accommodation that will be required for a great number of years, or to admit that the only way out of the difficulty is by decentralising the Infirmary, using the present building for such purposes as it will serve without much alteration of its fabric, and seeking further from the centre of the city the new and needed accommodation.

It is asserted in a Munich paper that a second Hymn to Apollo, twenty-eight lines in length, and with musical noting, has been discovered in Greece. It is engraved upon a marble tablet, and celebrates the birth of Apollo, the origin of the City of Delos, the arrival of Apollo in Delphi, his victory over the serpent, and ends with a prayer for Greece. The notes of this new Pæan were found upon a neighbouring fragment of marble.



AN ENTRANCE TO THE PALACE, SHAFTESBURY CIRCUS.

MR. T. COLLCUTT, ARCHT.

give a definite opinion. Repairs to some of the other buildings on the Acropolis are said to be necessary, but none of them are so urgent as those imperatively demanded at the Parthenon. As the famous temple is less the property of the Greek nation than of the entire civilised world, a general appeal to the lovers of Greek art of every nation in aid of funds to secure the safety of the building will be made. The lowest estimate for the repairs that are indispensable is £40,000.

THE proposal of the Douglas Town Commissioners to introduce into the bill for regulating and licensing places of amusement a provision for closing at half-past ten all places of entertainment, except theatres, is provoking strong opposition from licensed victuallers and those interested in the Palace, Derby Castle, Falcon Cliff, and other places of amusement. A determined opposition is

ON the first stone of the monument to Garibaldi, laid the other day at Rome, in presence of the King, was sculptured the effigy of Garibaldi, and inscribed in red letters the words: "First stone, March, 1895, monument to Garibaldi." The parchment walled in with the stone is a fine piece of illuminated work, adorned at the four corners with the coats of arms of Savoy, Rome, Nice, and Sicily and Naples. The inscription runs as follows: "Born 4th July, 1807," then in Gothic letters: "In perpetual memory. On the 19th March, 1895, Humbert I., King of Italy—when Francesco Crispi was Prime Minister—placed the first stone of the monument which the Italians, having been restored to liberty, determined to erect in the eternal city of Rome to Guiseppe Garibaldi." Below is the date of the hero's death: "2nd June, 1882."

THE Barrow Steel Company have lately been prospecting for iron ore at the Park Mines, five miles from Barrow, with the result that a most valuable deposit of rich hematite ore has been discovered. An analysis shows the ore to be of 58 per cent. metallic strength, with only 8 per cent. of insoluble residue or silica. The great advantage of this find is that the Barrow Steel Company, as owner of the mine, can secure deliveries of the very highest quality of metal at their works at Barrow at about 8s. per ton, compared with 13s. 6d. per ton, which is the present value of Hodbarrow metal. As nearly two tons of ore are required to make one ton of pig iron, this will give the Barrow Company an advantage in the market of about 10s. a ton. The Duke of Devonshire is the royalty owner, and no higher royalty will be paid on this new ore than on commoner ores which are raised. At a time when so much competition is experienced owing to great importation of Spanish ores, this find is of extreme importance to Furness, and will help to place the native hematite district in a position to hold its own against all comers.

A STATEMENT of proposed naval works at harbours and dockyards, drawn up by the Admiralty, has been issued. For the enclosure and defence of harbours against torpedo attack, in addition to £373,000 already sanctioned by Parliament at Gibraltar, it is now proposed to spend £681,000 more on the detached mole and in deepening the harbour there, £650,000 on Portland breakwater, and £1,920,000 on Dover breakwater. For adapting naval ports to the present needs of the fleet, in addition to £3,375,000 already sanctioned at various ports, £290,000 is proposed to be spent on Hong Kong dockyard extension. For naval barracks it is proposed to spend £595,000 at Portsmouth, in addition to £397,000 already sanctioned at Chatham, Walmer, and Keyham; and for superintendence and miscellaneous charges a further outlay of £179,000 is proposed, in addition to £121,000 already spent. The new works proposed amount to £4,315,000, making, with the amount of the works already sanctioned, a total of £8,581,000.

YET another exhibition! Arrangements for the display of old clocks, at the Royal Aquarium during May and June, are making satisfactory progress. Mr. Ritchie, the managing director, has obtained promises of the loan of a number of curiosities, but, wishing to make the display as varied as possible, he is asking all the possessors of clocks and watches of historical or other interest, to allow them to be placed on view at Westminster. We may shortly anticipate an efflorescence of "art" clocks keeping time with "art" furniture. This may be the only "time" they will ever keep!

THE collapse of the well-known tunnel under St. Catherine's, just outside Guildford, on the South-Western line from Woking to Portsmouth, appeared to be due to the frost, and to have occurred when the ice melted. The hill through which the tunnel runs is of sand, and not of chalk, like the greater part of the adjoining ridge, and, with its ancient chapel, a relic of the times when pilgrimages were made past it from the west country to Canterbury Cathedral, is a landmark for miles. Something like a thousand tons of sand and a coach-house and stables buried an engine and train, which was luckily empty, and the driver, fireman and guard, were fortunate enough to escape with their lives, though not without injury. Some time must elapse before the tunnel can be cleared, and passengers will for the present have to pass round the block by vehicles. Fortunately, there is an alternative route to the south coast, so the inconvenience will not be so great as it otherwise would have been.

A SCHEME has been set on foot by the rector of North Meols, near Southport, for the erection of a church midway between St. Cuthbert's, Churchtown, and All Saint's, Southport. It has been found impracticable to extend or rebuild the old Church of St. Cuthbert's, while the new Church of St. Simon and Jude is deemed unsafe owing to the moss land. It is considered that a new church in another part of the district would best meet the wants of the growing population. Mrs. Hesketh, the widow of the Rev. C. Hesketh, the lady of the manor, has given the site and promised £2,000 to the building fund. Over £5,000 and a site have been promised, including £1,000 from the Mayor of Southport, who is a Wesleyan. A liberal act like this speaks for itself.

PARISIANS have latterly been rather anxious about the condition of one of the most notable landmarks of their city—the Arc de Triomphe. Fragments of stone commenced to fall from the upper part of the arch, and a committee of architects was commissioned to see what was the matter. It was not until the structure had been half enveloped in scaffolding, and the minutest examination made, that the architects were able to give a satisfactory report. They find that the condition of the arch is not as grave as was at first feared. There is not the least danger of its total collapse, but it is deemed necessary to provide against further fragments becoming detached. The repairs will be mainly on the surface.

THE long-mooted scheme for constructing a canal connecting Lake Superior with the Atlantic is again being brought to the front, and if the necessary permission can be obtained, a company is to be formed to carry it out. The canal can only be made by the co-operation of the Canadian and United States Governments, and, should it be done, it will revolutionise American commerce. Chicago will be made a seaport, and the Far West will be placed in direct communication with the World. It is estimated that the canal will cost at least thirty million pounds.

RECENTLY a meeting of the committee of the Carlyle House Purchase Fund, which has been formed for the purpose of purchasing the Chelsea Sage's residence in Cheyne-Row, was held at Dr. Garnett's residence, British Museum. The gathering was private, but the business consisted of deciding whether subscriptions should still be asked for to clear up the deficit which exists of £400. Much of the money already contributed to the fund has come from America—yet another illustration of the apathy of England to the relics and residences of her great men!

A SCHEME involving the construction of an entire new railway between the English and French capitals in time for the next Paris Exhibition in 1900, and involving a capital of over £33,000,000 sterling, is, to put it mildly, rather a staggerer to the average imagination. The London and Paris Railway, the very sanguine prospectus says, would convey passengers, mails, and certain descriptions of goods between London and Paris in four hours and a half. Next!

NOR the least of the items which will figure in the Votes that are to come before the House of Commons later in the Session, is a sum of about £30,000 on account of the proposed addition to Westminster Abbey. Little has been heard of this scheme of late, but it has nevertheless been making steady progress. The Office of Works have got rid of all the tenants in the houses to be demolished but two, and an arrangement with these it is expected will shortly be made. It will then be possible to proceed at once with the clearing of the site, in order that the way may be paved for the decision of the larger question of the character of the addition which it is advisable to make to the Abbey. This is a matter which will be left for final decision by some specially appointed body, probably a Select Committee of the House of Commons. Meanwhile it is anticipated that there will be no difficulty in securing the assent of the House to the expenditure already incurred, as well as of a sum which it is anticipated will be required for the purchase of a house not included in the original list of buildings marked for demolition, which obscures the view of the Chapter House, and, generally speaking, interferes with the completeness of the work in hand.

THE "Art of William Holman Hunt" was the subject of a recent lecture delivered by Mr. Whitworth Wallis, of the Birmingham Museum and Art Gallery, at the Royal Institution, Manchester. After travelling the well-trod battle field of the pre-Raphaelite Brotherhood, Mr. Wallis spoke of Holman Hunt's early struggle for admission to the Academy schools. He failed, tried again, and his drawings were rejected. Then his father spoke seriously to him, said he was wasting his time; but young Hunt said he would try once more, and did so, this time successfully. He was then seventeen. Then commenced his friendship with Millais and Rossetti, the finding of the book of engravings, and the starting of the pre-Raphaelite movement. Mr. Wallis described each of Mr. Hunt's principal works as they had been produced, commencing with the "Rienzi," incidentally remarking that Dante Gabriel Rossetti sat for Rienzi, and Mr. Stephens assured him it was the best portrait executed of the poet-painter at that time. In speaking of the "Christian Missionary" and the "Two Gentlemen of Verona," Mr. Wallis referred to the ignorant and vulgar abuse showered upon the pre-Raphaelites at that time, but he truly said that not a word was remembered now, whilst the pictures so abused were now famous, and the artists amongst the greatest of the age. Of all the English pre-Raphaelite painters, Mr. Hunt had remained the most consistent, the most exclusive in his aims and methods. No artist who had ever lived had been so painfully and so thoroughly conscientious as Mr. Hunt. Every picture had been painted with the utmost of the artist's strength and the keenest of his emotions.

THAT inevitable Mr. Whistler, of whom some people are getting a little wearied, challenged Mr. George Moore, author and art critic, to a duel; presumably in return for Mr. Moore's having done his best to make the British Public appreciate Mr.

Whistler's pictures. Mr. Moore took no notice of the challenge, and now Mr. Whistler crows and chuckles and calls him a "runaway." It imperturbability *can* run away from hysteria, then Mr. Whistler has doubtless gained a bloodless victory, and may strut the Paris boulevards like one of his own peacocks. But the duel had been fought and won, and without any running away at all, common sense having triumphed. Mr. Whistler can hardly be expected to understand such a victory. But he has done what he could to restore a Parisian reputation that was a little clouded by the commercial spirit shown in the transactions over Lady Eden's portrait.

THE great merit of the collection of pottery presented to Weston Museum, Sheffield, by Dr. R. S. Marsden, formerly of that town, lies in the circumstance that it illustrates the manufacture of pottery in Britain in chronological order. It will probably be removed to Sheffield soon after Easter. There are between 200 and 250 specimens, including important and characteristic examples of the following wares:—(1) Dwight's Fulham stoneware, (2) old slip or Toft ware, (3) salt glaze or Crouch ware, (4) Old Delft (Lambeth, Bristol, Staffordshire, and Liverpool), (5) Wheildon ware (tortoise shell, agate and melon), (6) Wedgwood ware (50 examples), (7) Staffordshire figures, and other early examples, (8) Leeds ware, (9) Liverpool pointed ware, (10) early lustred ware, and other specimens, such as Rockingham, Davenport, &c.

THE committee of the Walsall Hospital have had a meeting to consider the necessary rebuilding of the hospital, damaged in the wind storm of a week ago. It is conjectured the cost will not be less than £1,500. The committee considered that by temporarily converting the committee room and two recreation rooms into wards the difficulty might be tided over, and provision made for thirty patients. The intrepidity and coolness of the nursing staff and servants, under the trying circumstances in which they were placed, also met with a warm acknowledgment.

MR. HENRY TATE, in making his gift to the nation of the principal pictures of his collection, and in building a gallery in which they might be housed, stipulated that the new gallery, whilst affiliated to the National Gallery, should have its own Board of Directors. Mr. Tate has, upon further consideration, resolved to hand the gallery and its contents absolutely over to the nation. It will, therefore, be entirely under the control of the Directors and Trustees of the National Gallery. A communication to this effect has been made to the Trustees.

THE west front of Peterborough Cathedral is so well known for its beauty and unique character that its condition can hardly fail to be a matter of widespread interest throughout the country, writes the Dean of Peterborough to the daily press. Many will, no doubt, regret to learn that it suffered very severely during the recent wind storm. Four of the pinnacles have been injured or destroyed, and it is feared that many other parts of the façade have been seriously shaken. The full extent of the damage cannot be ascertained until Mr. J. L. Pearson, R.A., has made his examination, but from a preliminary inspection which has been made by Mr. John Thompson, a builder, it is manifest that a considerable expenditure is immediately necessary to secure the safety of the west front. The gables of the north and south transepts and part of the Eastern Chapel have been for some time pronounced by Mr. Pearson to be in an unsafe condition. The Dean makes an urgent appeal for funds. Peterborough had fallen into a deplorable

condition a few years ago, and the work of renovation must necessarily be both costly and complete.

BEFORE the Improvement Committee of the Liverpool Corporation, Mr. W. H. Picton brought forward the plan of Mr. Henry Sumner, architect, for the improvement of the city, by the construction of direct high-level approaches from London Road and Lime Street to the Pierhead by means of viaducts parallel with the existing routes respectively of St. John's Lane and William Brown Street, passing over the Old Haymarket, and meeting near the juncture of Dale Street and Manchester Street. The scheme involves the clearing away of the large block of property between Manchester Street and Dale Street, the greater part of which, however, consists of Corporation leaseholds. Mr. Picton explained the scheme at length, and showed that it afforded possibilities for an unrivalled and greatly needed public improvement, with the provision of



A CORNER IN THE PALACE: MR. T. COLLCUTT, ARCHITECT.

a commanding site for public buildings. The City Engineer has to report on the suggested improvement.

THE great German Canal between the Baltic and the North Sea, now completed, will affect nearly all commerce with the Baltic, and especially our own. In plain terms, it cuts off the sharp and dangerous corner of the navigation by the Sound, which not only entails a great waste of time, but involves all sorts of difficulties both in peace and war. The Baltic is almost a landlocked sea, and this canal gives it another outlet. Hitherto, the only practicable means of access to it was by way of the Danish coast, and in easily conceivable circumstances, this one might have been blocked by an alliance between the Northern Powers. It is this consideration which has urged Germany to spend eight years, and nearly 7½ millions sterling in constructing the new waterway. The work is primarily a military one in its

inception and purposes, yet peace will gather the fulness of its harvest of benefits. The military advantages are certainly incontestable. Germany has the great port of Kiel on the Baltic, and she commands the mouth of the Elbe on the other side. Between the two lies this broad passage, and now the largest men-of-war can be floated with ease from sea to sea, without the slightest reference to the good pleasure of any other Power whatsoever. The proportions of the canal are majestic. It is 64 miles long; it has a width of nearly 65 yards at the top, and of 24 at the bottom, with a depth of over 9 yards; and it will take a man-of-war and a merchantman side by side. When two large warships have to pass, one must give the other the "pass" in a siding. It crosses four railways and five high roads. It will be open day and night and all the year round, summer and winter for it is believed that the warmer sea stream will keep it free from ice except in seasons of unusual severity. Ships will, of course, have to pay a toll, but the toll has been calculated on the basis of the saving they will effect by using the shorter passage. To meet the threatened competition, Copenhagen has been declared a free port. Vessels which might otherwise take the shorter route may therefore still be tempted to take the longer one when money is of more importance than time. The gain in distance ranges from 106 to 424 miles (from nearly all the English ports, as distinct from those of Scotland, and from 6 to 44 hours, or for sailing vessels as much as three days.

ST. SAVIOUR'S, Southwark, having adopted the Public Baths and Washhouses Act, the Commissioners have erected, at the cost of £40,000, buildings in Lavington Street, on a very complete scale. They consist of hot and cold first and second-class private baths, a handsome first class swimming bath, with a clear water space 100 ft. long and 30 ft. wide, and a cheerful second-class swimming bath slightly smaller. The accommodation is in all respects excellent, and the latest improvements have been carried out in the lighting, warming, and sanitary arrangements. In winter the largest bath can be converted into a spacious hall for public meetings. The establishment will be a boon, not only to the Metropolitan Brigade firemen, the police, and postal workers engaged in the neighbourhood, but also to City clerks and to Board-school children.

A MEETING of the Chester Town Council was held on Wednesday afternoon, when it was resolved to purchase the Dee Flour Mills. The purchase price is stated to be £7,000, and will include the weir and the water rights which are associated with the mills. The Council has for some time past had under consideration the prevention of the pollution of the Dee; and if they eventually decide to place sluice gates at the Old Bridge, the purchasing of the mills, it is believed, will greatly assist them in the scheme.

THE new Avon Street United Presbyterian Church is to replace the present one, which was erected in 1779 in connection with the Burgher sect, which eventually became part of the United Presbyterian body. Mr. J. B. Wilson, Glasgow, is the architect.

THE memorial of the late Frank Holl, R.A., the work of Mr. Gilbert, has been fixed in the crypt of St. Paul's Cathedral. Mr. William Agnew, who acted as secretary and treasurer of the fund, is making arrangements for a public ceremonial, which will take place in the cathedral shortly after Easter.

THE Sunday-school which is being added to Richmond Hill Wesleyan Chapel, Leeds, will consist of an assembly room, 64 ft. by 35 ft., seated for 450 persons, and on either side classrooms. An infants' class-room, &c. The cost will be £2,800. The architect is Mr. G. F. Danby, of Leeds.

The Builders' Journal COMPETITIONS.

No. 1.—A Sea-side Bungalow.

The drawings submitted in our First Competition are now being judged by

MR. ASTON WEBB, F.R.I.B.A.,

and his awards will be announced in due course.

No. 2.—A Village Club House.

The Proprietors of the BUILDERS' JOURNAL invite drawings, in competition, from those under twenty-six years of age, for a Village Club House, on a corner site, 150 feet by 40 feet. The Club to contain a general room with a dais for the villagers, a reading room and library, a bowling alley, service bar, tea room, committee room, housekeeper's apartments, and three cubicles for public use. The necessary outbuildings must be provided. Cost not to exceed £2,000. Drawings to be delivered at Talbot House, Arundel Street, Strand, not later than Monday, the 6th May, 1895.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

The portion of Hesketh Memorial Church, Southport, to be first built, will comprise nave, aisles and chancel, and vestries, at a cost of £12,000, with accommodation for 1,000; provision being made for a future tower, transept, &c. A few architects have been selected to compete, the plans having to be submitted at any early date.

In the course of a few weeks, Islington will be placed in possession of its third baths and wash-houses. Unusual difficulty and delay were experienced with regard to the building site, but at last a piece of ground in Tibberton Square, Essex Road, was secured for £5,250. Mr. A. Hessel Tiltman, the architect, who designed and carried out the two previous establishments, has been appointed architect.

The Builders' Journal.

MEN WHO BUILD.

No. 8.

MR. JAMES BROOKS.

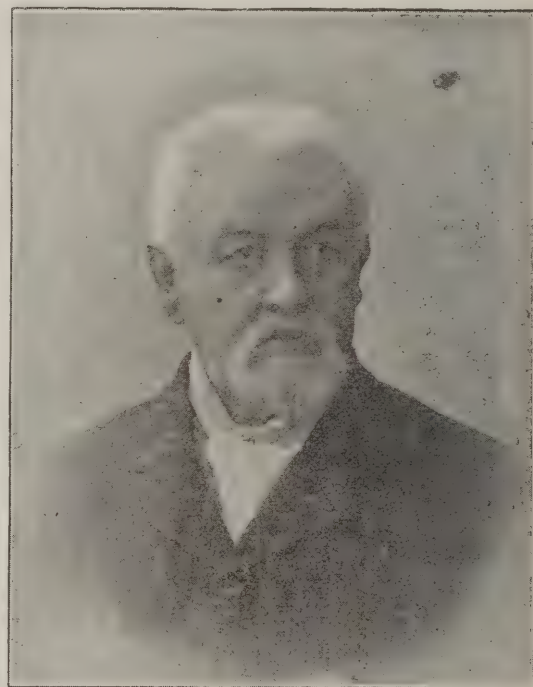


If you have ever mounted the steep stairs of 35, Wellington street, Strand—if you have had anything to do with building these forty years, especially church work, you will know the way and how breathless the journey—it may have struck you that there are more drawings and plans in the offices of Mr. Brooks than

ever architect drew. They lie about in heaps, in bundles, in portfolios, the dust of years upon them with the appearance of the dust of ages. Yet how many of these are the work of one determined head, chock full of church ideas, and one skilled pair of hands. For many years Mr. Brooks scorned assistance, hating pupils as the Devil is supposed to do holy water, in forty years practice having only four young men "forced" on him; drawing and planning late and early, early and late; in every way, even in his art, a robust man; a man who still sticks to his desk, standing, and is young enough, though some way past sixty, to greet you in a shooting coat at the very top of those interminable stairs. Here is no *dilettante* of Persian rugs, pictures and fine china. The drawing desk grimly looks business, and you are in one of the finest rooms, so far as light goes, in London. The aspect is northern—the room being high above the chimney pots of the neighbouring houses—and the light floods the room—soft, generous, shadowless. Mr. Brooks is a great believer in a naturally well-lit room, and he prides himself on his "workshop" being one of the best, in this regard, in London. In the other "drawing" room, where Mr. Brooks' son works with his assistants, greater order prevails; drawings are prettily hung in gilt frames, as if they were the aristocracy of the business, while the leviathan working-drawings jostle each other in a crowd in the outer office. Mr. Brooks will tell you that his housekeeper has one

merit, she leaves dust alone. To disturb this, at this late period of progress, would be to obscure the perspective for all time.

James Brooks is a remarkable man, even among architects, and he was no less a remarkable boy. His father was a farmer of the old school, and one glimpse of James Brooks to-day would tell you of the bone and sinew of his stock. It was in Hatford, Berkshire, that James Brooks was born, a village to-day, and a village, neither more nor less, sixty-odd years ago, when the future architect came into the world, primarily it seemed to make acquaintance with his father's kine. Farming was farming then, *without* science. Perhaps it paid all the better without science, but, men and boys, they had to work. A singular thing about the village of Hatford Mr. Brooks told me—its total population has not varied; a round dozen in his lifetime.



There they go: farmers and serving men, their wives and children, down an even healthy lane of life. But the lowing of cattle had no music for James Brooks. As a boy his gift for line broke loose within him; he struggled with ideas while he tended sheep in his father's fields. And so it happened, I



WORTH CHURCH, KENT: MR. JAMES BROOKS, ARCHITECT.

THE BUILDERS' JOURNAL.

THE INTERNATIONAL BUILDING TRADES' EXHIBITION. SUPPLEMENT.

Published with
Vol. I., No. 8.]

TUESDAY, APRIL 2nd, 1895.

[Gratis.]

OUR SURVEY.

CONTINUING our Survey of the exhibits at the International Building Trades' Exhibition under conditions which allow of a free and unfettered judgment, we discover at

Messrs. Duckett's

Stand a collection of sanitary specialties, including Latrines, Slop Water Closets, Channel Gullies, and any number of Syphon Ventilating Traps, designed on the best common sense principles, and possessing all the qualities of good manufacture. There is one thing about the business qualifications of this firm quite worthy of mention. Messrs. Duckett see the value of good illustrated catalogues, and they have wisely gone to the trouble, for some years, to provide the public with remarkably clever detail drawings of their specialties. We have before us, as we write, quite a couple of dozen sheets full of scale drawings, most accurately planned and figured, from which the most detailed information can be gathered.

Messrs. Arthur Lee & Bros., Ltd.,

exhibit a collection of the white and coloured marbles most generally in use. Some of these are shown in flat slabs, and some in round columns. They also show a series of photographs of their yard and factory at Bristol, and of works which they have executed in marble. Notably amongst these are some photographs of the New Clifton Pump Room, the roof of which is supported by 20 columns; and 24 pilasters of Swiss Cipollino Marble. Each of the columns is a monolith 15 ft. in length by 1 ft. 6 in. in diameter. They have also specimens of Marble Mosaic, and some samples of Marbleised Slate which is manufactured by them. The sign at this Stand is also to be noted. It is of black enamelled slate, with incised and gilt letters thereon. The firm claim that by their process of enamelling they obtain a surface of a flinty hardness, which will withstand the weather even in this climate.

The Somerset Trading Company, Ltd.,

of Bridgewater, at Stand 164, Row F, have a small erection roofed with their improved plain tiles (a specialty with this firm), with barges, hips, and valleys. These tiles are manufactured by a patent process under heavy pressure, making them non-porous. They are free from kiln-cracks, tough, and of a pleasing colour. Size, 10½ in. × 6½ in., and if laid to 4 in. gauge 550 cover a square. They also show other roofing tiles of their manufacture—an improved triple angular tile having several advantages over the old pattern—they can be used with battens to different gauges in straight courses or with break joints; an interlocking double Roman square shouldered to break joint; their Patent Holdfast Double Romans, which cannot be blown off a roof, all being locked together; the ordinary Double Roman and Triple Tiles; Poole's Patent Bonding Roll and Phillip's Patent Lockjaw Tiles; Machine-made Ridge Tiles; Beaded and Ornamental Tiles of various patterns; a variety of Finials;

moulded Front and String Course Bricks with returns, &c. We notice the even and good colour of the manufactures of this firm. Of

The Plastic Marble Company,

who show their material applied to various uses, we hardly know what to say. Personally we do not love artificial materials manufactured for the sole purpose of imitating natural materials at a fraction of cost of the genuine thing. Of the wear of the plastic marble we have no personal knowledge, but we see no reason why it should not be long lived. Of the two columns built up at the stand, the one imitating "sienna" is one of the most remarkable pieces of deception we have seen, but the amazing colours which are in demand by purchasers of this kind of thing do not appeal to our sense of fitness. At any rate, plastic marble is as passable as polished slate and has almost as many virtues. Persons interested can see specimen work of the Plastic Marble Company at Harrod's Stores, the Duval Restaurant in Wormwood street, and the Chandos Hotel in St. Martin's lane.

Messrs. Stanley Bros.,

of Nuneaton, have built up a delightful little "boggie hole" of their glazed bricks, which appear to us of very fine quality. The brown enamelled bricks—why they are called "enamelled" we do not know—of which the plinth is constructed are extremely good, and the granite-faced glazed bricks introduced in band courses have taken our fancy so much that we intend to use them in a range of stabling about to be erected for the principal proprietor of the "B. J." The grotesque finial on the roof of this "hole" is of a fine rich red brown, and most cleverly modelled. The firm also show at an adjoining stall a collection of Blue's, Copings, Red and Buff Quarries, Red and Brown Roof Tiles and Chimney Pots, and various manufactures in Ornamental Red Terra Cotta. There are also, we notice, examples of Sinks and Gully Traps (hand pressed).

Messrs. S. & E. Collier,

of Reading, show a pretentious pavilion in Terra Cotta, which is not a credit to their reputation or their goods. Exhibitors should be wary of these specially designed baby palaces. They are generally manufactured and constructed in a mighty hurry, and being so brand new they show every possible defect, which in an ordinary way would not exist. In the specimens of their manufactures there are some very ugly joints. The tile hanging is very imperfectly done, and much general discredit will accrue to the reputation of a really excellent firm, as Messrs. S. & E. Collier are. We are acquainted with the goods of the Grovelands Potteries so that the little imperfections of their stall will make no bad impression on us, but if Mr. James Brooks, who is the "Men Who Build" in this issue of the BUILDERS' JOURNAL, to say nothing of such rabid haters of Terra Cotta as Mr. Leonard Stokes, could but see them they would be more determined in their hatred than ever. The Ridge Tiles

and Finials shown by this firm are quite beautiful.

Messrs. Ellis, Partridge & Co.

have an ideal stand, octagonal on plan, with a fine collection of the "Redbank" manufactures. We have never seen before such a number of different goods of such uniform colour and texture. Terra Cotta goods, moulded bricks of all description, chimney tops, floor bricks, red copings, elbow one another off the closely packed shelves. Messrs. Ellis, Partridge & Co. inform us that they have at their Measham Works, near Atherstone, the finest grinding machinery and drying apparatus for the manufacture of their Bricks and Terra Cotta goods, and they are undoubtedly of an excellent quality.

Messrs. Gibbs,

of Loughborough, have a small exhibit of their well known red and white facing bricks, sand faced pressed bricks, Terra Cotta strings, panels, diapers, red ridges, finials, chimney tops and many of the other multifarious goods manufactured by first-class clay working firms. Their sand pressed bricks are as good as any we have seen for a long time. The only exhibitors of York Stone are—

Messrs. Geo. Armitage & Sons,

Robin Hood Lofthouse, near Wakefield, who show six samples of blue and brown stone of various degrees of hardness, in cubes of 6 in., showing sawn, rubbed, and fractured facets. They are Robin Hood Blue, Carlinghow, Thornton Blue, Howley Park Brown, Bolton Wood, and a very fine grained nearly White Limestone, well worth the attention of architects and others who want an effective and good stone for fine mouldings and carvings. We understand it is very durable, and Messrs. Armitage offer samples and information to any interested enquirer.

Another glance at

The Albion Clay Company's

Stall interests us in Sykes' Improved Street Gully which has a great depth of water seal, and the outlet is much lower than in other gullies so that heavy traffic cannot break the pipe connections. An improved yard gully has a large grate area, and minimum exposure of water surface, the cleansing arm being fitted with Sykes' Patent Screw Stopper. Sankey's Improved Deep Intercepting Gully has a specially constructed galvanized iron bucket to collect the detritus, being easily removed without untrapping the drain owing to the great depth of water seal. Keith's Patent Water Testing and Flushing Trap for testing drain and soil pipes, and for effective flushing, is simple in construction and reliable in action.

Messrs. Thwaites Brothers, Ltd.,

exhibit a No. 10 Andrew-Howatson Diurnal Water Softener, capable of softening 1,000 gallons per hour of hard water, rendering it fit for all industrial and domestic purposes. These softeners can be arranged in any way to suit the building into which they are to be placed, and are the simplest and the most efficient in the market, requiring minimum amount of personal attention; also

model of Andrew-Howatson Filter for the removal of all suspended matter from turbid or muddy water, rendering it bright and colourless. A battery of these filters, to treat two-and-a-half million gallons per day, has lately been erected at Cairo, and similar ones are at work filtering town supplies at Paris and Nantes.

The honey-comb wine bins made by

Messrs. King and Smith,

are delightfully simple—and simple things have a great fascination for us. The bins consist of terra cotta tubes, circular in interior section, hexagonal on the outside. Each tube takes one bottle. If you are one of those fortunate individuals with a palate above cheap claret and the horrible concoction of the household brewer, you can lay down just as many tubes as your cellar requires, and be perfectly happy.'

The Paragon Bolt Syndicate, Ltd.,

of 14, Sherborne Lane, London, E.C., are showing, in addition to their Bolts for Doors, Cabinets and Casements, a specially designed spring flush bolt for stable work, that can be operated from either side of the door; it appears to be thoroughly efficient, and can be manufactured in iron or brass. An automatic catch for Cupboards and Cabinet work is extremely neat and simple, and should commend itself readily to architects in place of the abominations usually used for cupboards. Nothing is visible of the catch when the doors are closed. A decided little pull opens the cupboard instantly. The "Chancery" letter box is also exhibited, from which it would appear well nigh impossible for "outsiders" to extract letters; this desirable and unusual security for letters is obtained in a very simple and ingenious manner, and the stallkeeper informed us that a japanned letter box fitted with good lock

and key and the patent safety attachment is sold for ten shillings. It is about time that the Postmaster-General had some such arrangement as the "Chancery" attached to all pillar and wall letter boxes.

John Tann's Exhibit

consists of all the different descriptions of Safes, Strong Rooms, and Fireproof Doors. The special feature of the new pattern Party Wall Doors is an angle iron stile on door, instead of the ordinary flat stile, the advantage being that it adds greatly to the rigidity of the door and prevents its warping, a consideration of the utmost importance in event of fire; the price is also much lower than that charged for the usual paneled doors. New pattern fire resisting Warehouse Doors are designed for heavy risks of fire. The back of the door is fitted with a 4-in. chamber filled with steam-generating fire-resisting composition. An ingenious bolting arrangement is fitted, which ensures the door being fastened, as only one movement is required to throw a bolt at top, bottom and front. In face of the failure of so many doors in recent great fires, this is just the thing that seems wanted. There are ordinary paneled Party Wall Doors and Plate Closet Doors for butlers' pantries; Strong Room Doors of various qualities, and a very fine specimen of a Fire and Burglar Proof Bankers' Bullion Room Door, weighing two tons, complete with steel vestibule and ventilating grille. Mr. Tann also shews a neat Five-guinea Safe for dwelling house use, and elaborate Burglar and Drill Proof Diamond Merchant's Safe.

We have returned to the Stall of

The Expanded Metal Company,

completed since our former Survey, and have found, as we fully expected we should, one of those sparkling simple marvels which no

one knows why it was not discovered before. The inventor of expanded metal is Mr. John French Golding, who has already amassed a fortune in the States, where for the last twenty years he was a resident of Chicago. For many years prior to his having evolved this new idea, says an American contemporary, he published *The Industrial World* of Chicago, one of the ablest, most widely circulated and authoritative industrial journals in America. In this capacity he became familiar with almost every branch of industry, particularly the iron industries, to which his paper was chiefly devoted, and becoming impressed with the working possibilities of homogeneous metals, he evolved the idea of cutting alternate slits in sheet metals, and opening or expanding the sheets at these slits, thus to form a netlike open metal work. It most resembles woven wire, and is fast substituting its uses, because of the cheapness and rigidity of the sheets thus formed, qualities essential to the employment of metals for use as lathing, fencing, railings, guards, trellis work, etc. It was used for all these purposes almost to the exclusion of other forms of metal work at the World's Fair at Chicago. About thirty miles of expanded metal was used in and about the building for fencing and railings, and probably three or four times as much was used as lathing, hidden from view in the plastered walls and partitions. The system of expanded itself metal is extremely simple. All the subtlety of the thing lies in the machinery that expands it. Sheets of metal of varying thicknesses up to half an inch are run through a machine provided with cog knives which cut the sheets and drive them down into their "expanded" position in the same movement, and the method of their expansion brings the metal "end up" to whatever pressure is brought upon it. For instance, there is a six feet span of park fencing, about four feet high,

Telegrams—
"HAYWARD," WOLVERHAMPTON.

ESTABLISHED 1860.

TELEPHONE
No. 7123.

WILLIAM HAYWARD & SONS,

MANUFACTURERS OF

Ornamental Wrought Iron ENTRANCE GATES	Strained and BARBED WIRE Fencing.	Wrought Iron Sheep and Cattle HURDLES.	Ornamental Wrought Iron PALISADINGS
WHEELBARROWS and Sack Trucks.	Wrought Iron ROOFING and General Smith's Work.	Unclimbable HURDLES and Railings.	Tree Guards and Game Proof Hurdles.

Illustrated and Priced Catalogue Post Free. SPECIAL LOW Quotations for Large Quantities.

BRUNSWICK WORKS, BILSTON ROAD,
WOLVERHAMPTON.

made out of a single piece of sheet metal four and a-half inches wide, and yet leaving a width of an inch and a quarter for its top bar. The cost of these panels is nominal compared with anything of the same size and strength. It is easy to imagine how far this system of expanding sheet metal can be extended, but nothing we have ever seen comes up to the metal "lathing." So easy of attachment and so cheap in cost. To give some idea of what can be done, half-inch rods suspended from a ceiling beam and screwed taut at the bottom end, can be covered with the metal lathing rendered on either side in lime and hair, floated and set, and then be only a couple of inches in thickness. We are afraid this system uses more plaster on the key side of the lathing than ordinary wooden laths, but that is doubly compensated for by the perfect keying, by the enormous rigidity of the partition which also tends to tie the interior of the house more firmly together, and by the thinness of the partition. There are a thousand other uses for expanded metal; it is applied on this particular stall in forming casings round iron stanchions, in fire-proof floor construction, in coverings of ceilings, and in other fashions; and in all there is one splendid qualification—the absolute minimum of metal with the maximum of strength, and that alone deserves the high praise we have bestowed upon it.

Messrs. Cresswell & Son,

of Bradford, show somewhere in the Exhibition an Asbestos Fire Blower, which, although we have been unable to discover it, recommends itself to us. It appears from information the makers are good enough to send us, that the blower consists of a sheet of asbestos cloth fitted to mantel opening, which is held or hung in position when it is necessary to revive a drooping fire. The "Curfew" arrangement of the same thing

which becomes a fixture and allows the cloth sheet to be rolled up out of sight when not in use. The whole thing is a useful novelty we should like to see.

We have paid a second visit to the

Self-Lock Roofing Tile Company,

and have had the manufacture of the tiles explained to us. They appear to be made from very excellent sand and Portland cement, in the good old proportion of three to one, and the hand machine that makes them is ingenious. A metal tray, the size of a tile, is inserted under a press and has the colour powder sprinkled over it. The cement and sand in a plastic state is spread over and rammed with a hand mallet. A double-handled knife then cuts off the superfluous material. The press is then pulled along its slide until it rests over the little tray of wet cement, when the "lock" of the tile is poured on down a funnel shaped V and the turn of a handle brings a knife through a slit in the funnel and chops off the "lock" to its proper thickness. Of the tediousness of the manufacture we have nothing to do; of the tile itself we have much. This is the first time that a tile is offered for roofing purposes that is not fired in a kiln, and the Self-Lock Roofing company have something to say on this score in favour of their manufacture. We do not feel ourselves qualified to express at the moment an opinion as to the lasting qualities of such a startling novelty, but we have possessed ourselves of specimens, and are submitting them to an expert, when we will deal further with them. This we can assert, that if the strength and lasting qualities of the tiles is proved, then there is no better covering for warehouses and other large roofs than these Self-Locking Tiles.

Of automatic windows which, on the pressure of a button, commence gymnastic exercises and eventually clean themselves

without the desire to break the neck of a pretty parlour maid, there is no end. The story of

The N. A. P. Window,

in a charming green and gold cover, has been sent to us, and we have seen the window itself at the Exhibition. It has many good qualities, the sashes are top hung instead of centre pivoted, and the stay bar is not nearly so clumsy as it looks, but the N. A. P. Company, however successful they may be with their window, have a method of sash opening which charms us, for until we saw it on their stall we knew not of its existence. The question we asked last week as to what we could do with our casements has been answered by this Company, they have metal and wooden ones, which open either inwards or outwards, and we recommend every architect in the Kingdom to see them immediately. As far as we are concerned the whole story of the N. A. P. Window need never have been written, but the story of the N. A. P. Casement is another matter. It interests us deeply. The address of the inventors is 157, Victoria Street, Westminster.

Robert Adams

shows many of his World-known Door Springs, Ventilating Apparatus, Casement Bolts, Victor Stays, and many of the door springs are most compactly designed and admit of ready fixing in any position. The Crown Victor Door Spring, for instance, can be regulated to suit any requirement, whilst the working parts are so arranged as to offer a minimum of friction, so enhancing the durability of these goods. The Impregnable Front Door Bolt, with automatic lever locking action, is also shown, and gives the greatest security, combining in one case the functions of a night latch, hall-door lock, and tower bolts. The lever combination is unpickable and unforcible, and so the inventor

ELLIS, PARTRIDGE & CO.,

LEICESTER AND LONDON,

(Stand No. 7, Building Trades Exhibition),

Manufacturers of

"Redbank" Facings, Ornamental

Brickwork and Terra Cotta, also

"Woodville" Sand-Stock Facings.

Slate Merchants, Slating and Tiling Contractors, &c.

London Agency—Mr. T. FREEMAN,

200 and 202, Phoenix Street,

St. Pancras, N.W.

assures us absolutely reliable. The quality of Robert Adams' goods may always be relied upon. They may be obtained at the Adams' Building Trades' Emporium, 67, Newington Causeway.

W. Peek Taylor,

of 40, Chancery Lane, has a couple of Gordon Terra Cotta Wind Guards exhibited, and as he has recently delivered to the Bank of England thirty-six of these curers of smoky chimnies, as a "repeat" order, it is pretty certain that the Gordon Wind Guard performs its functions. The price of these things is extremely reasonable, and they are not unsightly.

Turpin's Parquetry.

is one of those old established things that we

could hardly do without, and in design and finish it is quite perfect. We do not seem to come across much parquetry in actual work. No one can see Turpin's beautiful examples without longing to use it.

The Marpedo Compound Company,

of Reading, exhibits the Marpedo Washable Water Paint, and the panels that were shown to us were distinctly pleasing in finish. This material can be used in place of lime wash for any suitable purpose, and is made in many very charming colours.

Some of the most perfect specimens of turnery are shewn by

The Clapton Steam Joinery Mills,

at their stall; in fact, we have not seen anything more charming than the pitch pine

baluster made by this firm from the design, we understood, of Mr. Cates. The machinery by which these things are turned out is evidently of the most perfect construction. We should like to know more of these beautiful turnings.

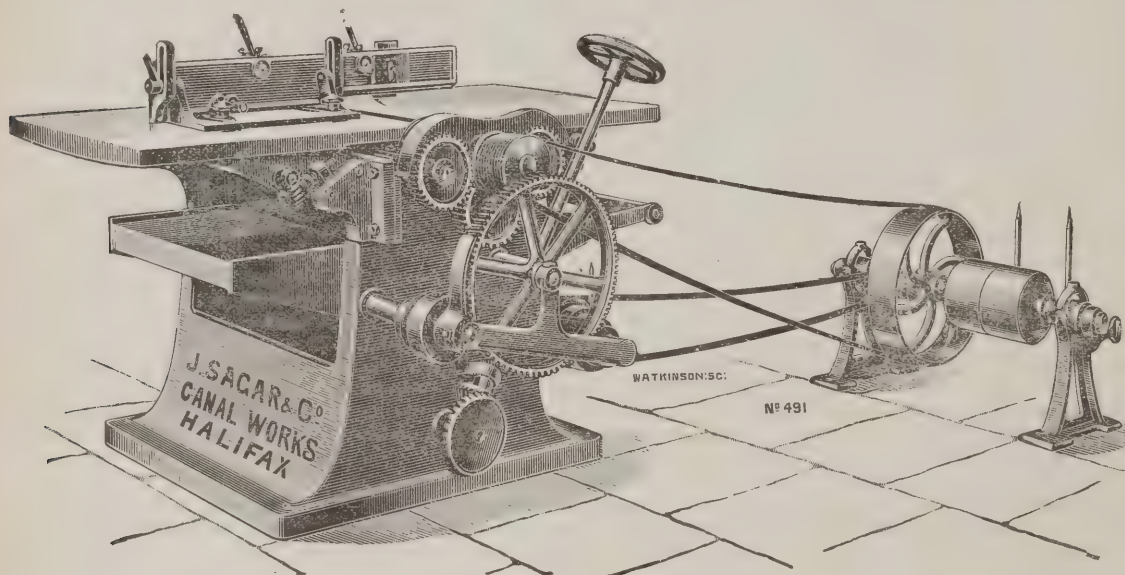
The steel clad copper baths, shewn by

The Sanitary Bath Company,

of Camden Town, have an American flavour about them, and the perfume of otto of roses, and waiting maids with silken towels seem to be hiding somewhere in the background. Others beside Yankee millionaires may bathe in a steel plated bath, although honest glazed earthenware is good enough for us. No one can tolerate a marble grained abomination after seeing the exhibits of this company.

Messrs. Sagar Co.,

of Halifax, give us most delight. To watch the little tables over which the nicely planed wood travels and comes out fashioned for all sorts of uses, grooved or tongued or moulded, one can wonder to what end labour saving machinery will at last take us. Messrs. Sagar have a reputation for this species of machinery, quite unapproached. The specimens, shown in their bay are finely cast, the spindles are of fine steel, and the bearings are of phosphor bronze, and the various parts are adjusted to absolute nicety. We give an illustration of the "Premier" Hand and Roller Feed Surface Planing, Thickening, Moulding machine, which can be used by every joiner and builder who has power.



"The Marriage of Ingenuity and Simplicity."

K_{AYE}'S PATENT WEDGE LOCKS

— AND —

K_{AYE}'S PATENT SAFETY CATCHES

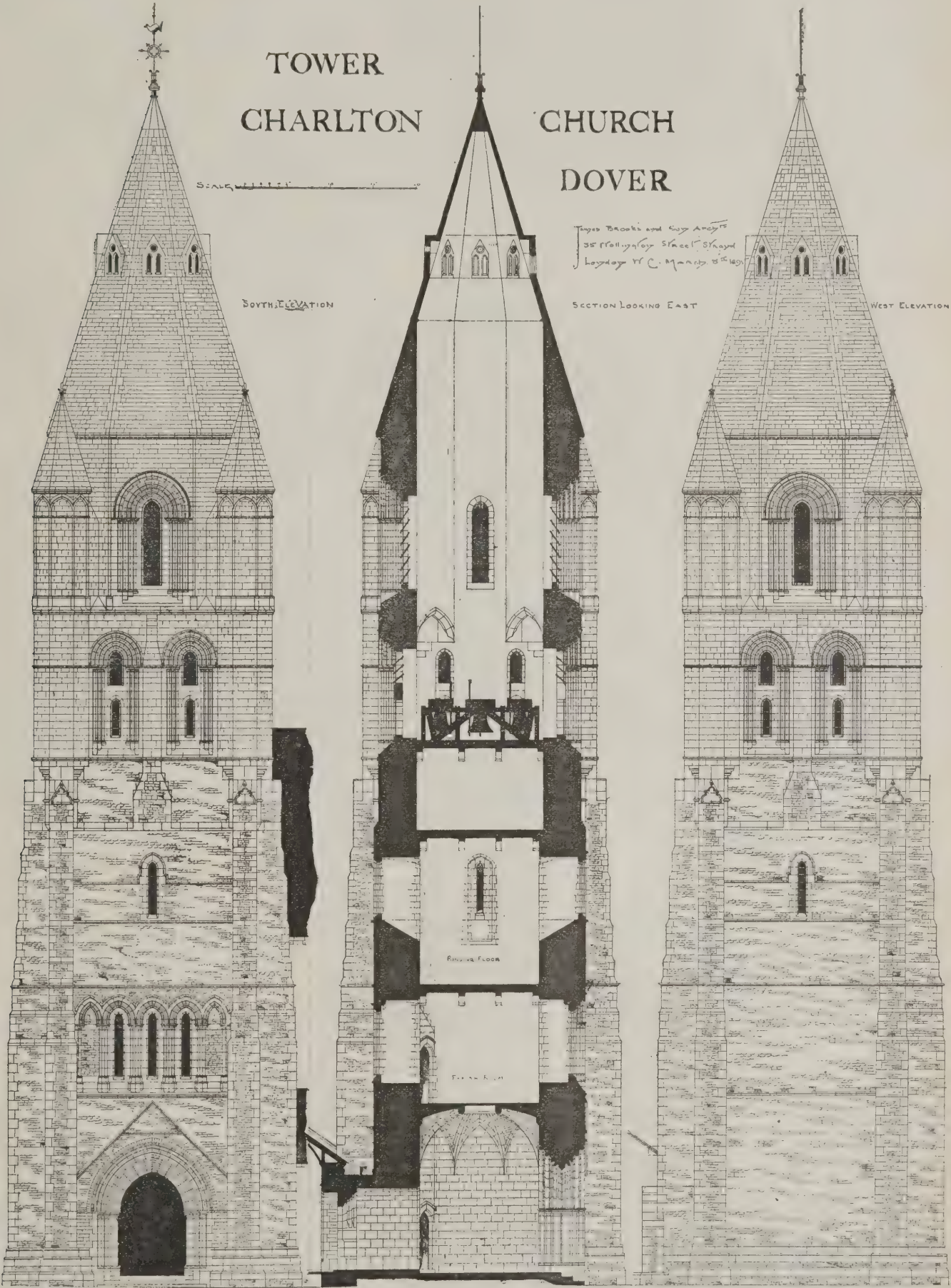
**Are acknowledged to be the Finest and Most Ingenious Specimens of Lockmaking in existence.
A Perfect Revolution in the Locksmith's art.**

KAYE & SONS make Patent Locks, Bolts, Latches, and Handles for every kind of Door, Desk, Drawer, Fanlight, Window, Cupboard, &c., including Railway Carriage and Brougham Locks, Cart and Railway Wagon Doors, all of which have great advantages over all others. Also Patent Exit Fittings for doors that open outwards and for doors that open both ways, which were invented to meet the wants of the London County Council.

Prices and Particulars on application to

JOSEPH KAYE & SONS, Ltd.,

93, High Holborn, London, W.C.; & Kaye's Patent Lock Works, Hunslet, Leeds.



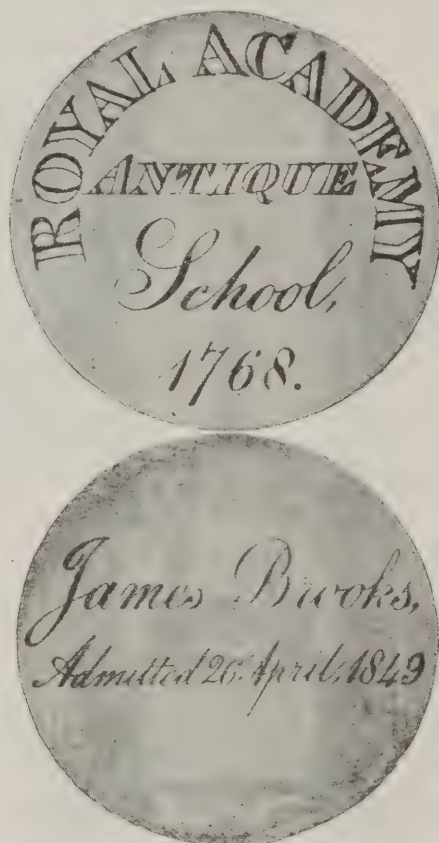
MR. JAMES BROOKS, ARCHITECT.

suppose, that the waste of time, in the old-fashioned manner of threshing, one day struck the growing lad with the force of a sharp stone, and he set himself to remedy a laggard and a lapsing system; one which took the hour easily, never anticipating that "devil's own team"—steam. James Brooks invented a threshing machine, and people came to see it, even other inventors. No doubt they derived more benefit than did James Brooks, for that is one of the wicked ways of invention. But there must have been grit in his idea, for one maker acknowledged his indebtedness by presenting to Mr. Brooks, Senior, one of the first machines made, even then valued at £300.

The young inventor still claims your notice for there were other irons in the field. James Brooks turned his attention to the plough share, and it was immediately evident (to him) that the plough share—respectable relic though it happened to be—needed reformation. It is a singular instance in paradox that a man with such a love of the old and the venerable as James Brooks, should, as a boy, have set the traditional appliances of agriculture at defiance. No doubt the farmers of Berkshire used strong and lurid language, despising the fandangles of the architect to be. But it is a fact that he added a new "breast" to the old style of plough share, a "breast" which is practically the "breast" of to-day. The old style broke the soil unevenly and left it unfinished; the new "breast" curved the soil gently and beautifully away; herein, perhaps, the first hidden hint of Brooks' future predilection. Now you may see the furrows running to "vanishing point" on all respectably ploughed and rotund land.

There are men who lie fallow for a while and then prove themselves "strong land" before the world is aware of their existence. Such a man was James Brooks. The farm life fretted him, yet he was gathering strength without knowing it. No man, devoid of robust physique, could have marched with his work as he has done these forty years. He was twenty years old, and had never had a drawing lesson in his life, when he came up to London in 1847, full of a determination to design and to invent, and without much of the wherewithal that is the courage of less self-reliant men. There were twenty-four hours to the day in those times, as Mr. Brooks will tell you, and his experiences were harder than the average drawing board. He will laugh in good-natured appreciation of those days. There were firms and firms then, as now, but the young student's lot was at first cast with one of those establishments that lived to exist merely, and barely permitted their pupils to do that. And yet Fate did him an unexpected turn, for in 1849—you may care to see a reproduction of the little ivory admission badge—James Brooks was admitted to the Royal Academy Schools without effort, having "tried his luck" there. I suppose, because this triumph was so easy, he has never done much for the Royal Academy since. Norman Shaw was also entered "student" at that time, and the two men were as compatriots in a cause, only Brooks went into the field and hedges, while Norman Shaw, in more disciplined fashion, fought for the academic wing of that small army of architects who so surely rescued from out of the dreary ashes of the Georgian era so much of what is fine and free, simple and dignified in modern architecture. Later, James Brooks became associated with Maltby and Lewis Stride, and afterwards with Frank Cross, of whose office he was in sole charge for two years. It was a sort of Cox and Box arrangement, for the farmer's lad was smart enough to work for one man during the day and for another the greater part of the night, and, I would add, strong enough too. "Three 'shows' I ran,"

said the Gold Medallist of to-day, "and did something on my own account also!" If you were inquisitive you would learn how James Brooks did a great deal on "his own," working like a galley slave, and having the audacity to get married while most architects are still boys dreaming of building a Parthenon or a St. Paul's. "Nose to the grindstone" is Mr. Brooks' phrase for that time, but you are amused to note that the facial feature has not suffered. Work came to him while he was busy in the offices of other men, and in his early heyday he did without an assistant, even when engaged upon six churches concurrently, completing with his own hand the six sets of drawings. The young architect of to-day may like to have Mr. Brooks' philosophy summed up in a sentence. Here it is: "Work! Those who talk most know least." There is a spice of the old militant spirit in his attitude



to the young men of to-day. He speaks of them in a fatherly manner, and of some humoured tolerance. He can make even his strong points interesting, a success not always attained. The finest architecture in the World, he will insist to you, is that of the Greek and Egyptian Temples. "Such severity and dignity of line! Such a sense of proportion! Such elimination of the trivial, effeminate detail which I so cordially hate!" There he goes! In a careful cupboard he will reveal to you the MSS. of Professor Thomas Leverton Donaldson's invaluable lectures on the subject; lectures which ought to be read by every young student—alas! that they are so remote in Mr. Brooks' careful drawer. By these models the latterday builder of so many churches was guided. He learned to love their rigidity, their unbending discipline, their utter lack of the spirit of compromise; their power and their truth. And when he came to work in the Gothic and the Renaissance, the austere spirit was still upon him, he drew his lines before over-ornamentation could sap their strength, he gave height for dignity's sake, and space for light and shadow, and you have here the secret of Mr. Brooks' success as an architect. That he has worked in

brick so much is for the very prosaic and practical reason that, in the South of England at least, stone is too dear. The builder must work in the material that is to hand. The necessity for brick has given us those clustered brick columns in so many of Mr. Brooks' churches, and he has built churches in England, Ireland, Scotland, Wales, New Zealand, Australia, and South Africa, though to these Greater Britains he has not been. He can tell you of a mansion he built—by letter and telegram—for a rich Dutchman in South Africa, and of the visit of the owner to England to see the architect when the building was complete. There had not been a mistake; everything had been carried out to the letter, and lo! there had risen, far away in the Veldt, a house in the style of the Tudors. Of the "Queen Anne stuff," at present in vogue in England, Mr. Brooks thinks little, but you may find the real thing in Holland, he will tell you, and the real thing is charming. When he goes to Holland and Belgium, now, the ecclesiastics welcome him as an old friend. The man must have his little joke at the present phase (or craze) of building; he describes it as the terrible cotta! I suppose James Brooks could not be exhausted—certainly not in this paper. He rode to hounds till he was nearly fifty, and he only gave up shooting four years ago; he is a hearty fellow at his little "box," as he terms it, which he built thirty-three years ago, and still lives in, but it is probable you know, as well as I, where that is.

You will know his work if you know the man—what he has done, for instance in remodelling St. Mary's, Haggerston; the fine Cloister, almost hidden away, at St. Michael's, Shoreditch; the churches at Hoxton, Haggerston, Kensington, Hammersmith, Hornsey, Lewisham; the beautiful Church of The Annunciation, Chislehurst; and that vast scheme, but partially carried out, as yet, of Covent Hospital, Chapel, Cloisters and House at Edware.

Of Mr. Brooks' striking individuality in architecture a little incident may be recalled. Some while ago a young architect from London was staying at Doune, N.B. He attended the services in the Episcopal Church there, and afterwards he called on the Vicar and expressed himself as delighted with the Church. Without a moment's hesitation he said, "This is one of Brooks' churches I know." The Vicar enquired of his visitor if he knew the architect. "No," was his reply, "but I can tell Brooks' buildings wherever I see them." Our full page illustration is of his latest accepted design—a Church Tower at Dover.

James Brooks has won his Gold Medal and the reputation of being one of the most sincere and solid ecclesiastical architects in England.

THE electric lighting of Manchester has proved a great success. At the end of the first year's working, after paying interest on mortgages, sinking fund, &c., and excess of management expenses—always proportionately greater on a first year's working—the committee found themselves with only a loss of £209 18s. 10d. That was from March 31st, 1893, to March 31st, 1894. From March, 1894, to March, 1895, they would be able to show a profit (after deducting interest and sinking fund) of some £7,000 or £8,000.

A COMPARATIVELY small but important street improvement will be completed this month in the setting back of the line of building on the south side of Carr's Lane, Sheffield. Mr. Watson has accepted £3,000 to set back his property. With the improved facilities for traffic will be combined an important architectural improvement to the street. Advantage has been taken of the rectification of the building line to rebuild the premises affected. The new building, of which Messrs. Ingall & Son are the architects, and Mr. T. Johnson is the builder, is in the Renaissance, and consists of four storeys,

SPECIFICATIONS: FROM BOTH POINTS OF VIEW.

PAPERS READ BEFORE THE ARCHITECTURAL ASSOCIATION.

A MEETING of the Members of the Architectural Association was held on Friday evening, at No. 9, Conduit street, under the chairmanship of Mr. E. W. Mountford, the President. There was a large gathering. Mr. Fletcher (Hon. Sec.), announced a donation to the library by the Secretary of the Report of the Smithsonian Institution for 1893, and a vote of thanks was passed. A vote of thanks was also given to Mr. J. M. Brydon, for conducting Members

The specification of to-day is an inordinately lengthy document as compared with those written say twenty years ago, and a mass of matter is now squeezed into its pages that serves only to perplex the clerk of works and worry the builder. I think a great deal of the extra length can be accounted for by the introduction of most of the "conditions of contract." These properly belong to the "contract" as the legal document, and only cumber the pages of what should essentially be the working document. Another cause of lengthiness is the way in which expanded descriptions of trade manufacture are worked in. The system of splitting up a specification, rigidly, into trades has much to answer for in introducing elements of confusion and

in the constant use of words defining quality. The words best, very best, proper, perfect, &c., are all relative terms of quality which frequently are quite differently interpreted by the architect and builder, the one using the word in the ordinary sense, and the other in the manufacturers' sense, and they should be quite abolished, and the definite expressions of the manufacturers used instead, as by so doing we shall, as regards materials at all events, have a common basis of agreement with the builder. A common defect is the frequent disagreement between the specification and the drawings it is supposed to describe. If quantities are supplied the surveyor can easily adjust the variations in description, but assuming their absence,



over the Chelsea Town Hall, Polytechnic and Free Library, on March 16th.

FROM THE ARCHITECT'S POINT OF VIEW.

Mr. E. C. Pinks had been announced to deliver an address on "Specifications: from an Architect's Point of View," but the chairman announced that Mr. Pinks was unable to be present owing to illness. His paper, therefore, was read by Mr. Fletcher. The following are extracts:—

I propose to examine critically the specification as it is; to pass from that to a consideration of the necessity of specifications as they are at present drawn; and thence to a few suggestions for the abolition of specifications as separate documents in a contract.

differences. Each architect has his own view as to where a certain article should go, and if he consistently follows out the trade system what a number of references have to be made before you find out all about a window for example. There are many cases where four or five references might be profitably put together, especially when you remember that the practice of allocating the items under trade headings differs considerably. What I want to emphasize is that a great deal of time might be saved by combining things together a little more than is done, and let the trade distinctions take care of themselves.

The phraseology of the modern specification also leaves much to be desired, especially

each person tendering puts his own construction upon the clause, with the inevitable result that whichever way the architect wants the work done an extra ensues. The drawings must be the paramount factor with the architect and builder, although the employer often attaches more importance to the specification, probably because he understands and can criticise a written description, whereas, alas! drawings to the average employer are like maps to a South Sea Islander.

Does it not come to this, then, that more work on the general or small scale drawings, and less in the specification, would tend to considerably reduce the friction between architects and their clerks of works and the contractors? Carry this idea to its legitimate

conclusion, and half the causes of dispute would disappear.

This brings me to the second division of my paper—viz., a consideration of the necessity of specifications as they are at present drawn.

It has always seemed to me that the necessary documents or instruments of a contract should be, first the plans, elevations, sections, and detail drawings; second, the description of the materials to be used, which of necessity must be a written document, and for convenience is called the specification; third, the conditions of contract, or legal restraints, by which you bind the builder to do the work in accordance with the plans and specification, and also bind the employer to pay for the work done.

To successfully carry out this idea it will follow that the small scale drawings must be prepared with perhaps a little more care and with considerably more detail than they generally are at present. I believe much greater attention is being paid to the small scale drawings than used to be the case. It would be perfectly easy for the draughtsman to add, either by writing or graphically, to the general drawings, most of the information which now burdens the specification. For instance, taking the elevations, why should you not express, once and for all, by printing on the drawings the facings you want, the arches, whether axed or rubbed, the parts of the work in bath or portland or in both, the parts to be cemented or rough cast, the windows which are to open and which fixed, the glass to be used, and many other things? On the plans, why should you not say what flooring or paving you require, what the hearths are to be, what thresholds, what roof-covering? On the section, the sizes of floor-joists and roof timbers, the descriptions of skirtings? Once on the drawings they are done with, few queries would arise, the surveyor will get through his work quicker, the foreman and clerk of works will not be divided between something on the drawings and a contrary description in the specification. This all may mean rather more work for the architect at first, but will not the apparent loss of time amply repay him in the end, and certainly save delay on the works? A specification of one hundred pages takes quite a week to write, and even then is by no means a perfect document. Supposing, instead of devoting a week to writing a specification, you gave that week to finishing up and noting the drawings, what a tremendous difference it would cause. Surveyors do occasionally find a set of drawings with all the sizes of timbers figured on, and what I now plead for is an extension of that principle to almost every detail in the building. To satisfy these conditions a set of drawings would have to include a little more detail work, especially in the sections, and the draughtsman would have to put his section lines where they would show most work, instead of shirking the stairs and the lantern lights, as they often do at present. A plan of the roof timbers would also be desirable and some of the joinery details should certainly be among the drawings. Assuming you intended carrying this idea into practice (of putting work on the drawings instead of into the specification), the following, I think, would be the additions:— On the plans: the floors would have the material stated and the thickness; as to how the floors were to be laid and the kind of jointing that would remain in the specification, without a detail showed it. The pavings also would be described, and the hearths, steps, stairs, the direction of the joists and strutting, and the trimmers and trimming joists which might not possibly appear on the sections. On the sections: the skirtings, dado, and picture rails, cornices, architraves, thicknesses of doors—description of plastering, whether cement or lime, also the dados

and tile-hangings. On the elevations: the facings, arches, mouldings, rough cast, timbering, tile-work, what windows fixed and which to open, the glass, the external doors, the window sills, steps, and stonework generally. The roof plan would show at a glance which slopes were to be covered with inferior and which with better slating, also the lap, and whether boarding and felt; the roof, whether tile or lead, the flashings and lead flats, and every other item which at present it takes a few minutes to find in the specification. From the drawings we turn to the specification, as I suggest it should be, and we shall find more than 75 per cent. of its bulk is gone. In the preliminary part all the legal clauses, such as protection, damage, insurance, payment, time, sureties, rates of wages, will all be relegated to the contract. In the excavator and bricklayer all the descriptions of materials will remain in, and the way they are to be mixed and used, but all such items as depths of excavations, thicknesses of concrete, beds of brick rubbish, thicknesses of walls, mortar, fireproof floors, drains, facing bricks, parts in cement, finishings of internal walls, arches, moulded and gauged work, air bricks; all these would be cut out—as the drawings would show them. The mason would describe the materials and setting, all other work would appear on the drawings. The slater also would describe the materials and nails to be used. The carpenter would give the usual descriptions as to materials and a general clause about providing all wood, bricks, fillets, slips and backings. The joiner would also give the description of materials and method of laying and jointing the floors. Sizes and number of hinges, and prices of locks and furniture (although this could be quite easily put on the details). The founder and smith would state descriptions of materials and tests, also any iron-work hidden away. All straps and bolts, railings, girders and joists, rain-pipes, and eaves gutters would appear on the drawings. The external plumbers' work would all appear on the drawings and only the materials specified. The internal plumber work is a little more difficult to dispose of and until detail-drawings are given for this work, it would have to remain in the specification certainly as regards small pipes and taps. The plasterer would only describe the materials and the proportions. All glass would be indicated on the drawings, and therefore the trade would consist of a line or two. The painter would remain very much as at present. I have taken a specification of 120 pages, and by cutting out the items which I consider might be fairly described or shown on the drawings, I find it gets reduced to thirty-two pages, which includes some four or five pages for provisional sums and other items for which drawings would not be given. I propose to abolish the specification entirely when bills of quantities are supplied, and utilise them in its place. I say that I expect some opposition to this proposal, because I know that there are some difficulties in the way, not the least being that employers know of the specification, and usually expect to see it, whereas bills of quantities to them are unknown. I can imagine some architects objecting to the change because it would give too great a prominence to the quantities, and that it would necessarily result in the quantities becoming a part of the contract; why they should not be I can never understand; the employer pays for them, and they are generally used for the purpose of settling up accounts. The clerks of works refer to the quantities as much as to the specification, when they are allowed a copy, but, of course, as they are merely statements of fact and not descriptive, they are not so useful for reference as they might be. But, after all, the Scotch schedule of quantities is specification and schedule, and where we have in England references by the builder to what

the specification says, in Scotland he refers to what the schedule states. What is possible there should be so here.

Surveyors ought not to object to the proposal, but ought to welcome it, as their work would be brought into greater prominence and into a wider sphere of usefulness than it is at present. For the architect would have it at hand for constant reference, to settle points in connection with the details; the clerk of works and foreman would also use it, and many extras which are now incurred in ignorance, through the bills of quantities being sealed to them, would be avoided. I am prepared to admit that the bills of quantities might be rather longer—that is to say, they would be as at present, plus the necessary detailed description of positions in the building; but a saving would be effected in the printing or copying of the specifications, and the extra time spent on the bills would be saved in the time usually spent in writing the specification. I do not wish it to be understood that this method would do away with the necessity for detail descriptions on the drawings, but I do believe it would relieve many architects, who dislike specification writing, from a labour which is irksome to them.

FROM THE BUILDER'S POINT OF VIEW.

Mr. Henry Holloway's (Holloway Bros.) paper was on the "Builder's Point of View," he said:—

My first suggestion may appear trivial, but from a builder's point of view it is of some importance, namely: The form and arrangement of the specification should be in the simplest language, carefully prepared and legibly written, also set out in clauses, and under proper headings, with marginal or heading notes, each paragraph being indexed. Don't send the specification copied on tissue or letter-pressed copying paper, which is in shreds before it has been on the job a month. In these days of cheap and expeditious printing I venture to urge that printed or lithographed copies be supplied. The conditions of contract should be attached to and form part of the specification. The quantities should be in conformity with the specification, consequently the draft specification should be in the hands of the quantity surveyor before he proceeds with his work; but a little latitude might with advantage be given to the surveyor to vary, or add to, in minor points, in order to bring the drawings, specification, and the quantities in perfect line with each other. The practice of specifying sub-contractors and specialists is increasingly resorted to, in some cases almost to the extent of having separate firms for the principal trades. Architects who have had works in the North of England, and adopted the system of employing a separate firm for each trade, know something of the inconveniences of this course of procedure. The practice, generally speaking, increases the cost, causes delay in execution, and creates a considerable amount of friction between all concerned. In cases of special works, for which special men are required, such as are not usually engaged by the builder, or in the fixing and arrangement of patented goods which the patentees have to guarantee the efficient working and durability of, it may be desirable to provide for the sub-contractor to completely finish his work. But this custom should be minimised as much as possible, so as to give the builder entire and complete control over the whole of the building in course of erection, as he has to be responsible for everything. In all cases where sub-contractors are engaged by architects there should be an undertaking from the sub-contractor to comply with the conditions of the builder's contract as far as the same are applicable to his work. Probably the bulk of the builders' difficulties arise from a want of definiteness in the description of the architect's requirements. General "covering"

clauses in specifications are much too frequent. If the architect has a difficulty in regard to his working drawings, or in connection with the site of the proposed building, and is unable to specify precisely what has to be done, he has resource to his familiar "friend" (the covering clause), and throws all responsibility upon the unfortunate builder. Here is an extract from a specification as a sample of what I mean. "Do all necessary cutting and making good. Supply all materials and workmanship necessary, although not herein specified, to render the whole of this branch of the trade perfect and complete to the entire satisfaction of the architect." The same clause, with a little variation, appears after each trade. Such conditions as these have only to be exposed to be condemned by reasonable men, but unfortunately they appear only too frequently in specifications. In cases where it is impossible for the architect to specify clearly and in detail, and for the quantity surveyor to measure, the work to be executed, the proper and just course to adopt, both to the client and the builder, is to provide an amount to be used under the architect's directions, and the work paid for either by valuation after completion or charged for as day work. There is frequently much indefiniteness in the specification with regard to foundations. The builder has to take many risks for which he has very little opportunity of forming any idea as to whether it will involve an expenditure of £5 or £500. There should be always a practical reason for what is specified, and nothing should be specified unless the architect thinks it absolutely necessary to carry into actual execution. Also care should be taken not to specify what is a practical impossibility. The following are a few specimens taken from specifications to illustrate my point—viz.: "*The excavation to the trenches is to be taken down to a perfectly solid bottom, and the bottom well rammed!*" One naturally asks, why ram when you have a natural solid bottom? Is it not possible that if ramming is enforced you will not have a good solid bottom? Supposing the foreman carries out the specification, digs the trench to the depth shown in drawings, and has the bottom well rammed for the architect's inspection, it is possible the architect may be deceived by the sound appearance of the bottom and have the concrete put in upon what is anything but a natural sound foundation. "*The concrete in trenches to be well rammed.*" The absurdity of this description is obvious. To ram concrete immediately it is thrown into the trench in a soft condition is quite useless and a waste of labour, and if rammed after it has commenced to set, it would only tend to prevent its adhesion. "*The stock bricks are to be hard, well burnt, perfectly square, and of uniform colour.*" It is only necessary to visit a brickfield, and see the making of stock bricks to know the impracticability of this description. The description is quite contradictory to the nature of stock bricks, which are burnt in large stacks or clamps of about half-a-million each, with fuel sprinkled between to help the firing. The bricks that get the strongest heat will be the hardest, and as a matter, of course, to an extent flared and varied in colour. The weight of such a large quantity stacked together before being burnt must of necessity press the bricks somewhat out of square. The beauty of stock-brick facing to my mind is the slight variation of colour. "*The mortar to be composed of one portion grey stone lime to two portions of clean sharp sand.*" Either the proportion specified is not expected by the architect, or he must be ignorant of the proper proportions of lime and sand for good mortar. There is no strength in the lime of itself. The proportion of one of lime to four of good clean sand makes the best mortar. Particular quarries

for stone are frequently specified (especially Yorkshire stone), which have been worked out for several years. It is desirable, as far as possible, to avoid the mention of particular quarries, unless the clause is modified by the addition of the following:—"Or stone from some other quarry equal in quality to that specified."

Perhaps the most difficult part of an architect's specification is that in reference to timber, and the builder finds it more trouble than all the other kinds of material combined. The architect generally makes certain ground for himself by specifying that it is to be "perfectly free from sap, large knots, shakes, and all other defects." Such a description is very admirable if the material can be so supplied, but it is perfectly well-known that this degree of excellency cannot be maintained, hence the difficulty of interpreting to what extent sap, knots and shakes will be tolerated. Unfortunately the opinion of clerks of works (to whom this is usually referred) varies very considerably according to their knowledge, or other contingent circumstances. It is a mistake to suppose that because there is a slight discolouration on the edge of the timber it is unfit for use. Care should be taken to see that no sappy wood is built into a wall, or fixed in a confined position where there is no air space; but for open roofs, floor joists, and such like, the timber will not rot or become weakened because of a little *blue sap*, which is frequently only surface deep. I venture to suggest the following as a reasonable description for timber and joinery deals, viz.:—"For the best class of work: 'The Memel or Dantzig timber of the best selected middling quality.' For ordinary class of work: 'The Memel or Dantzig timber of the good middling quality; or (where scantlings under eleven inch wide, and four inch thick), from sawn scantlings of an approved Swedish or Russian port, not inferior to a recognised good fourth quality Swedish brand, or third quality Russian hammer brand. All timber to be free from large and loose knots and shakes, also practically free from sap to the architect's approval.' For joiners' deals: 'Good quality, from approved Swedish or Russian ports, free from large and dead knots, shakes, and sap. Not inferior to a recognised first and second quality Swedish brand, or second quality Russian hammer brand.' Pitch pine, and Oregon pine is much used for timber work, also yellow pine for cabinet work, but neither of these American woods is suitable for positions exposed to weather and damp. But for interior work it is much cleaner in appearance than the Swedish and Russian goods. A point requiring the special consideration of an architect in preparing his specification is that of fixing the time to be allowed for the execution of the work, particular regard being given to the period of the year at which the building is to be completed. It frequently happens that a job, say of a new house or an addition to a house, to the value of £2,000 to £3,000, containing a quantity of good joiners' work, is commenced in July or August, and has to be completed by the Christmas following. The specification insists that the joinery work must be of thoroughly seasoned wood, roughly framed together, and put into drying room within a month after signing the contract. (By-the-by, notwithstanding the stipulations, it too frequently happens that the details are not supplied until after the roof is on.) A moment's thought must satisfy anyone with practical knowledge that to put good seasoned joinery into a building erected under such conditions, and at such period of the year, simply means ruination to the work, and ultimately serious trouble and expense in easing doors and windows, stopping open joints, touching up shrinkages, &c. Moreover, the builder is condemned for supplying inferior material. In all cases where good

plastering and joinery is required, architects should make arrangements to avoid either of the same being proceeded with to any great extent on the building during the winter months. In conclusion, I would urge that in order to avoid friction, disputes, and to secure good work, there must be mutual confidence between the architect and builder. To secure this the architect should only invite to tender (where competition is required) those with whom he can take counsel and place confidence. There is far too much suspicion, especially on the part of the younger members of the profession. I do deny there may have been reasons for it, but, speaking generally, builders have a regard for their reputation.

At the conclusion of Mr. Holloway's address, an interesting discussion took place on the subject as treated by both papers. Mr. Fleetwood said in regard to Mr. Holloway's paper, he fully agreed with all that he had said, so much so that he did not know of any points on which he could criticise it. But in regard to Mr. Pinks' paper he regretted it; it was not accompanied by his ideal specifications and drawings. It would be interesting to see the drawings after they had been in use for six months. He was afraid that all the information that had been put on the eighth-scale drawings would be obliterated before the roof was put on, and he did not think that suggestion was a very practicable one.

Mr. Woodthorpe agreed with a good deal of what Mr. Pinks said about putting as much as possible on the drawings, although there might be one or two hundred items. In the country a builder depended vastly more on the drawing than he did on the specifications, and he personally had always found it much easier to see whether the work was carried out in the proper way if they had got the thing on the drawing than if he had got to wade through a specification 100 or 120 pages in length—however well it was indexed. He quite agreed that the covering clause should be done away with as far as possible.

Mr. Francis Hooper thought it was very important that architects should realise that it was not only the builder who tried to evade specifications and conditions, because they would find that some employers, and architects themselves tried to evade them themselves. (Laughter.) If they endeavoured to have more intercourse with the builders, as Mr. Holloway suggested, it would be to the mutual advantage of both.

Mr. Hampton Pratt thought the suggestion of Mr. Pinks to do away with specifications was a very bold one. He thought those who spoke most of the irksomeness and drudgery of getting out specifications, were those who knew least how and what to describe. (Hear, hear.) With regard to the writing of specifications in great details he thought it was unnecessary.

Mr. C. H. Brodie said he agreed with every word Mr. Holloway had uttered, but he thought Mr. Pinks' paper was full of fallacies. He did not see how Mr. Pinks' notion of abolishing specifications could be carried out in the case of alterations. Not only was a specification a check upon the builder, but was a check on the client.

The Chairman defended Mr. Pinks' paper in his absence. He was bound to say he saw little in it whatever to object to. The criticisms that had been made upon it had arisen, he thought, chiefly because the paper had not been carefully listened to. The length of a specification depended entirely on the quality of the work and the variety of detail. Mr. Pinks had had a lot to do with Scotch work, and possibly that might account for some of the things he said.

For the public fountain which is to be erected by Mr. Thomas, M.P., in Pontypridd, a design by Mr. C. B. Fowler, of Cardiff, has been adopted.

HOW TO OBTAIN ACOUSTIC SUCCESS.

A PAPER READ BY MR. BURROWS AT THE R.I.B.A. MEETING.

AN ordinary meeting of the Royal Institute of British Architects was held yesterday week, Mr. James Brooks (vice-president) in the chair.

The Chairman announced that an intermediate examination to qualify for registration as Student was held on the 19th, 20th, 21st and 22nd March. Applications were received from seventy Probationers, including those relegated from previous examinations. Of these, fifty-six were admitted, and fifty-four presented themselves and were examined; twenty-eight passed the examinations, and twenty-six were relegated to their studies. The names of the successful students, placed on the paper in order of merit, were as follows: John Ormrod, Bolton; Ernest William Marshall, London; Thomas Anderson Moodie, Hillhead, Glasgow; Thomas Spiers Fraser, Glasgow; Ernest Jesse Mager, London; Tom Norman Dinwiddy, Greenwich; Victor Evans Bösher, St. Leonard's-on-Sea; Herbert Haines, Bedford; Frank Ward, Bradford; Louis Moore, Southampton; William Stanley Bates, Bedford; Percy Bown, Harrogate; James Henry Coram, London; William Alphonsus Scott, Drogheda, co. Louth; Alexander Godolphin Bond, B.A., Bristol; Wallace Stevens Jones, Bristol; Arthur James Ecclestone, Great Yarmouth; James Stockdale Harrison, Leicester; Hugh Alfred Ellis, Manchester; William Vincent Morgan, Carmarthen; Arthur Reutlinger Gough, Redland, Bristol; George Herbert Manning, Harlesden, N.W.; James Edward Coleman Shield, London; John Arthur Smith, London; Edward Hale, King's Norton, Birmingham; Stanley Edward Knott, East Barnet; George Westcott, Old Trafford, Manchester; and Rupert Claud Austin, Cambridge. A paper on "Sound in Its Relation to Buildings," was then read by Mr. H. W. Burrows. He remarked that the form which a building should assume to insure acoustical success was a question upon which much difference of opinion existed. Simplicity of plan was not of necessity good for acoustics, square rooms being often found to be defective. Most authorities condemned flat surfaces, as reflections took place in the right angles of such apartments, at the floor, walls, and ceilings. It had been found of advantage in such cases to cant off the angles of rooms, or to curve the ends, or to place the speaker near the corner of the room, so that he addressed the audience diagonally. Some writers considered that if rectangular rooms were adopted they were improved if one dimension was longer than the other. Sound waves being propagated in spherical layers from their point of origin, curved forms had been recommended, but opinion was not unanimous on that point. Of buildings having a circular plan, St. Paul's was a well-known bad example; but this was mainly due to the close proximity of the speakers to the walls. Another effect would be produced if the speaker were situated in the centre of the circle or near it. Certain inconvenient acoustical effects experienced in buildings of circular plan were not met with in those where the walls were broken by a large number of deep embrasures. The Albert Hall, London, a building of the oval or ellipse type, had been almost universally condemned. Before it was built failure was predicted, as the reflections from such a form were known to be concentrated in the foci of the ellipse, and this, together with its vast size, form, and material of roofing, had combined to produce a great acoustic failure, modified to a certain extent by the introduction under the roof of a velarium. The amphitheatrical type of plan had proved successful in many instances; but some notable exceptions chiefly by reason

of excessive sonorousness, were referred to. Other types of plan were those in which the end was more or less curved, and the sides produced somewhat after the plan of the basilica. The L.C.C. council chamber, an example of this method of planning, was considered to be an acoustic success. One writer proposed to terminate rectangular halls with a parabola, and give a parabolic form to the roof over the platform. It was objected, however, that all sound originating in the body of a hall might be concentrated in the focus of the parabola, so that great difficulties presented themselves in dealing with a curved surface of that nature. Among buildings planned as elongated rectangles with rounded ends which were successful acoustically was mentioned the Queen's Hall, Langham place, a noticeable feature of which was the truncated, trumpet-shaped orchestra. The horse-shoe type of plan, largely adopted for theatres, had been attended with but varying success, depending much on the materials used in construction, and largely influenced by the boxes. Examples were mentioned of what the author termed a composite type of plan, in which the walls at the rear of the speaker or orchestra were formed as a truncated pyramid, diverging outward, with the seats arranged in a semicircle or other curve. In churches and cathedrals, the avenue type of plan had been criticised, because the columns which carried the arcades caused sound shadows, and were therefore objectionable. With regard to the influence the section of structures had on the propagation of sound, most writers agreed that smooth surfaces reflected sound, while broken or rough surfaces dispersed or absorbed it, so that in some instances it might be found advisable to break up the ceilings with rafters, or to form recesses or projections in the walls. A chief consideration in this connection was the size of the room. As to the form of ceiling, various conflicting opinions were quoted and examples cited, it being generally agreed that right-angle junctions between walls and ceilings were bad, as confusing reflections resulted, to obviate which some form of cove had been usually adopted. The difficulties presented by concave curves were shown by the failure acoustically of most domes or cupolas, due usually, it had been said, to the powerful and prolonged resonance produced. To prevent the loss of sound upward it was probably best to keep ceilings moderately low, consistent with good proportion. With regard to the dimensions of a building, what was known as harmonic proportion was strongly urged by many. For good acoustic properties, it had been maintained that a building should be so constructed that its different dimensions should be in some simple relation to each other. In treating of heating and ventilation and their effect on sound, Mr. Burrows said, a series of tests at the Baltimore Academy of Music had proved that the almost perfect acoustic properties of that building were largely due to the condition of the air, and not to the plan. The direction of the ventilation was of little or no moment. The principal office of ventilation in its acoustic bearings seemed to be that it rendered the air free from those acoustic clouds which disturbed, diverted, modified, or absorbed sound waves, as atmospheric clouds modified or destroyed light. The key-note of rooms was next considered. A hall built of masonry had a different note composed of that material. Beneficial effect had resulted from the presence of an audience, the addition of shelves filled with books and papers, the use of a velarium, flags and such like hangings, Venetian shutters, sounding boards. The use of wires and cords had been successfully recommended; the author referred to the bye-gone use of acoustic vases in classic theatres and in Mediæval churches.

SHEFFIELD SILVER PLATE.

THE "QUEEN'S" OR THE "LEOPARD'S" HEAD?

THE idea said to be prevalent in London regarding the merits of Sheffield silver ware, met with a strong condemnation by Colonel Bingham, who dealt with the subject at the recent Art Crafts' Exhibition in Sheffield.

"At the opening of the Exhibition," said Colonel Bingham, "Mr. Green stated he went into a shop in Bond Street and asked for some fine modern Sheffield plate, but was informed that there was no artistic work to-day in Sheffield, and that Sheffield was called 'The modern Tomb of Art.' In reviewing this statement, Colonel Bingham pointed out that large quantities of manufactured silver were sent daily to London from Sheffield, and that no city took so much silver work from Sheffield as London did. Two-thirds of the silver table ware of London was manufactured in Sheffield. Forty years ago it was his duty to call upon many manufacturers and silversmiths in Sheffield, and he then found that there existed a system under which a very large amount of sterling silver ware made in Sheffield was sent to London, where the London mark was stamped upon it. This system, he was sorry to say, prevailed to a very great extent to-day among people who ought to know a great deal better. He was not one of them, and was averse to the practice unless he was obliged to revert to it owing to stress of time, and to this point he would address himself later. The practice to which he alluded was contrary, he thought, to the spirit of the Merchandise Marks Act, and went to prove the unreliability of the observation made to the Master of the Guild by the Bond Street dealer with regard to the absence of artistic work in Sheffield. It was a shame that the London mark should be placed on the wares made by Sheffield silversmiths, and he thought the Sheffield mark, the Queen's head, should be accounted a far superior mark to the Leopard's head, the mark of London. There was another point with regard to assaying, with which he would like to deal. In Sheffield the Assay Office had been removed from Fargate to Leopold Street. The Corporation had paid a large sum of money for the ground upon which it stood, and he had no doubt that the money had been spent properly. The offices had recently been enlarged greatly in order that more work might be dealt with, and he hoped and thought it would not be found to be too large. In his opinion, it would have been much better if the small premises had been used and kept open every day in the week. Those who were not connected with the silver trade would perhaps be astonished to learn that if a silversmith sent in any goods after ten o'clock on Monday morning he could not get them out until Wednesday night. The result was that in his case some thousands of ounces of silver had to be sent to London to be assayed in cases of urgency. This was a great detriment to Sheffield. It would not be necessary, if the Sheffield Assay Office were open every day in the week. There was no doubt that the Government were right in having the Assay mark placed upon silver goods for the protection of the public, but, at the same time, Sheffield ought not to be handicapped by the closing of her Assay Office on alternate days, when in other cities, with whom her manufacturers had to compete, goods might be assayed every day. He thought the Master would agree with him when he said that if the Assay Office were to try in these competitive days to damage trade they could not do so more effectively than by the action they had taken. He concluded by congratulating the Guild upon the unearthing of so much talent, the presence of which was a direct answer to the Bond Street dealer."

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

Messrs. Baird, Thompson & Co.—The contract for the ventilation and heating of St. Mary's Church, Dover, has been placed with this firm.

Mr. Thomas Freeman.—Mr. Freeman desires us to notify that he no longer represents Messrs. P. & S. Wood, of West Bromwich, but supplies Blue Staffordshire goods of his own selection from his stores at St. Pancras Station.

Brighton Improvements.—It is proposed to make additions to the Town Hall at a cost of more than £20,000; to build a Fruit and Flower Market, New Police Courts at a cost of nearly £25,000, and a new Fire Brigade Station. Tenders are to be procured immediately.

Messrs. Gibbs & Co.—This firm has just completed a large stained glass window at St. John's, Bethnal Green.

Messrs. Ratty.—The macadam scarafier, made by Messrs. Ratty, is being tried on the Embankment roadway. It churns up the surface much as a garden rake would soft made ground.

Safety Sashes.—There is an epidemic in the joinery trade. The Building Exhibition contains no less than seven different systems for opening sashes for purposes of cleaning the outsides in safety. Nine patents for nine other systems have been registered during the past two months. They are getting as common as "smokeless" chimney cowl.

Admiralty Work.—From the statement of proposed naval works, drawn up by the Admiralty, it seems that an expenditure is proposed of £681,000 at Gibraltar, £650,000 at Portland, £1,920,000 at Dover, £290,000 at Hong Kong, £595,000 for naval barracks at Portsmouth, and £179,000 for superintendence and miscellaneous charges—in all £4,315,000.

A New Catalogue.—The Albion Clay Company have in preparation a catalogue of the sanitary wares manufactured by them. It is to be in colours and is promised to be quite an authoritative work on Sanitary Science.

The Bath Floods.—The City Council of Bath received last week a report from Messrs. Coode, Son and Matthews on the mitigation of floods in the city, and decided to engage the services of these engineers to furnish plans and estimates of the cost of carrying out so much of their original scheme as includes the lowering of the Pulteney and Twerton Weirs and providing movable sluices thereat, and, further, to report upon such other obstructions as they deem it essential to deal with. After a long discussion, it was decided to instruct Mr. Radford, C.E., to complete his plans of intercepting sewerage and of sewage disposal, and to furnish estimates of cost.

The Building Trade in Newcastle.—The building trade is once more fairly under way in Newcastle. There is a good deal doing, and a good deal more in the way of house-erection is promised in the near future. Mr. Hope's plans for buildings on the Sandford estate provide for from 500 to 600 dwellings. These will comprise villas, self-contained

houses, houses in flats, and semi-detached villas. At Byker, it is purposed shortly to commence house-building on the site of Gray's brickfield and adjoining land in the rear of the Conservative Club.

Leeds Water Supply.—The water supply of Leeds is in the hands of the corporation, and it is interesting to know that last year 4,745,000 gallons were distributed, of which 1,212,000 gallons were sold by meter for trade purposes. The income received amounted to £106,828 17s. 6d., the working expenses, £24,536 11s. 6d.; the interest on the debt £57,857 5s. 11d.—leaving a net profit of £24,434 19s. 1d. Such is the advantage of having a municipal supply.

Amalgamation of Works.—The South Wales Portland Cement and Lime Company, Limited, of Penarth, inform us that they have taken over the following works: The Aberthaw Pebble Lime Company, Aberthaw; The Aberthaw Blue Lias Lime Company, Bridgend; and absorbed the same into their present business. This gives the company a total output of about 1,000 tons of hydraulic lime weekly.

Bristol.—The Docks Committee have decided to provide additional lairage accommodation for 75 cattle, and to accept the tender of Messrs. Fountain & Boyd for the work. Also to construct chill rooms for from 200 to 400 sides of beef. Alterations—recommended by the engineer—to the abutments of Brislington Bridge and the gangway across the lock at Avonmouth Dock, have been approved by the committee; and repairs to the east side of Avonmouth Dock at a cost of £250 are also proposed. The borough engineer has prepared a report upon the question of the prevention of floods, the total estimated cost being £46,000.

Drainage Work.—Under this title a little book, reprinted from *The Surveyor*, and prepared by William H. Maxwell, of the Engineer's Office of the Leyton Urban District Council. The little book has for its object the massing of facts connected with the construction, examination, and testing of drainage works. The pages are profusely illustrated with most carefully prepared drawings, and the booklet is as handy a reference work as we have seen. The cost is one shilling.

Wood Pavement.—Messrs. W. Garstin and Sons, 760, Harrow Road, London, W., have procured letters patent for a non-slipping wood pavement, which consists of holes being bored in the blocks, into which are inserted plugs of lead. It is held that lead, being a material that will not disintegrate and "carry," it will always hold its own so far as wear is concerned, and that its introduction into wood paving improves rather than deteriorates its quality and durability while it increases its value as a safe foothold.

Messrs. Peace & Norquoy.—One of the most interesting and useful inventions for dividing schools is the Patent Improved Folding Partition of which Messrs. Peace & Norquoy, of Port Street, Manchester, are the makers. This partition was awarded the prize medal of the Sanitary Institute of Great Britain at the Health Exhibition, Liverpool, 1894, which, we understand, is the first and only medal ever been awarded for folding partitions. According to the testimony of a large number of eminent architects, School Board clerks and others, the partitions supersede all other methods of dividing and sub-dividing rooms. A boy of ten years of age can, with the greatest of ease, draw a large partition into position or fold it back against the wall in two minutes. We are informed that they are being fixed in a large number of schools all over England—seventeen having been recently fixed in the Congregational schools, East Finchley, under the superintendence of Messrs. Spalding & Cross, architects, London. Messrs. Kelsey & Head, architects, Horley, Surrey, have also introduced the partition in the Albert Road schools, Horley.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

C. W., Napton, Rugby, writes: "Some horticultural builders have put up a long range of houses for me, and heated the same with cast-iron hot water pipes which were coated with 'Dr. Angus Smith's composition,' to prevent corrosion. The gardener now says the pipes throw off an offensive smell when heated, which is injurious to his plants. I have used pipes coated with this composition for over 30 years, and know it is an excellent preservative, but I never used it on hothouse pipes before. Before I agreed with the horticultural builders, I asked if it would be right to so coat the pipes, and the makers (McDougall Bros., Manchester, and several other firms) said nothing injurious could possibly come from the use of it. I believe it is a fact, that when the pipes are heated very hot, plants put near die off at the ends. Can anyone tell me if this is likely to be caused by the coating on the pipes? If so, can anything—and what—be put on the pipes to prevent it? Would red lead paint, mixed with boiled oil, do it?"

CURRENT PRICES.

TIMBER.			
K H B	4 x 11 1st & 2nd Yellow...	per Std.	£18 0 0
DOM	4 x 11 3rd	"	15 15 0
P B W	4 x 11 5th	"	9 15 0
S K B	4 x 9 1st & 2nd	"	15 15 0
P T W	4 x 9 3rd	"	13 10 0
↑ ↑ ↑	4 x 9 5th	"	10 0 0
M G & Co.	3 x 11 1st (Gromme) Yellow	"	15 0 0
N R A	3 x 11 2nd	"	14 10 0
D x M	3 x 11 5th	"	8 10 0
	3 x 9 1st Onega	"	16 10 0
B S 1st S C	3 x 9 1st	"	15 0 0
D D D	3 x 9 3rd	"	13 10 0
H A B	3 x 9 3rd	"	13 0 0
D M	3 x 9 4th	"	10 5 0
R S S	3 x 9 3rd	"	9 15 0
M F D	3 x 9 5th	"	9 0 0
* * * *	3 x 9	"	7 10 0
W S N	3 x 9	"	5 0 0
S K B	3 x 8 1st	"	12 5 0
B A T		"	
S K A	3 x 8 1st & 2nd	"	8 5 0
H A B	3 x 7 3rd	"	10 0 0
O B B O L A	3 x 7	"	8 10 0
G W	2 x 9 1st	"	11 10 0
H H H	2 x 9 4th	"	10 0 0
	2 x 8 u/s Yellow	"	8 0 0
	2 x 7	"	8 5 0
	2 x 6	"	7 10 0
	2 x 5	"	6 15 0
	2 x 4	"	7 10 0
	2 x 3	"	8 10 0
F R 1	3 x 11 1st White	"	10 10 0
* P *	3 x 11 2nd	"	8 0 0
E F 1	3 x 9 1st	"	9 5 0
J A S	3 x 9 2nd	"	7 15 0
	3 x 9 1st Spruce	"	10 0 0
	3 x 9 2nd	"	7 10 0
	3 x 9 3rd	"	6 15 0
	3 x 11 1st Pine	"	26 0 0
	3 x 11 2nd	"	17 10 0
	3 x 11 3rd	"	10 10 0
H H H	1 1/2 x 7 1st Yellow	per Sq.	0 14 0
D D D	1 1/2 x 7 3rd	"	0 13 6
S B S	1 x 7 1st	"	0 11 0
S A B	1 x 7 2nd	"	0 9 6
S-TERTIA	1 x 5 3rd	"	0 7 0
J F J	3/4 x 6 mixed Yellow	"	0 8 0
Oregon Pine	... ..	per Std.	£12 to £15
Pitch Pine	... ..	£11 to £12 10s.	
"	fresh sawn	per load	42s. to 52s.
Mahogany, Honduras (logs)	... ..	per ft. sup.	3 1/2d. to 6 1/2d.
"	(large & prime)	"	9d. to 2s.
"	Tabasco	"	3d. to 5 1/2d.
"	Panama	"	3d. to 5d.
"	African	"	2 1/2d. to 7d.
"	(large & prime)	"	8d. to 2s.
"	Cuba	"	3 1/2d. to 9d.
Cedar, Cuba	... ..	"	3d. to 5d.
"	Mexican	"	3d. to 3 1/2d.
Sequoia (clear)	... ..	per ft. cube	1s. 10d. to 2s. 3d.
Birch Planks	... ..	"	1s. to 1s. 3d.
METALS.			
Iron—Cleveland Pig	... ..	per ton	34s. 4 1/2d. to 34s. 6 1/2d.
"	Hematite	"	41s. 3d. to 41s. 5 1/2d.
"	Scotch Bar	"	per ton 45s.
"	Best	"	£5 12s. 6d.
"	Extra Best	"	£6 7s. 6d.
Yellow Metal Sheets	... ..	per lb.	4 1/2d. to 4 3/4d.
Copper—British, Best Selected	per ton	£42 5s. to £42 15s.	
Sheets, Strong	... ..	per ton	£49
Australian Fine	per ton	£42 10s. to £43	
Lead—Pig	... ..	per ton	£9 17s. 6d. to £9 18s. 9d.
"	Sheet, English	"	£9 14s. 9d. to £10 1s. 3d.
Tin—English Ingots	... ..	per ton	£66 to £66 10s.
Australian	per ton	£62 17s. 6d. to £63 7s. 6d.	
Straits	... ..	"	£62 7s. 6d. to £62 17s. 6d.
Banca	... ..	"	£62 15s. to £63
Zinc—Sheet	... ..	per ton	£18 5s.

BOOKS RECEIVED.

The Cathedral Churches of Ireland:

Being notes, more especially on the smaller and less known of those Churches. By T. M. Fallow, M.A., F.S.A. With fifty illustrations. London: Bemrose & Sons, Limited, 23, Old Bailey.

Mr. Fallow has a heart for the poetry of descriptive writing, and it has helped him to produce a delightful little work, which, it quite simple in its architectural treatment of the small historic Churches of Ireland, still helps us to believe that there is a deal of happy old work in a land he certainly should not have hunted to discover it. We cannot say much for the illustrations which are crude and, in many instances, carelessly drawn. It is a pity that ninety-nine pages of charming and simple descriptive writing should be so poorly backed up.

SOCIETY MEETINGS.

Birmingham Architectural Association.—The concluding meeting of the session was held in the Exchange Rooms, when the officers for next session were elected. Mr. H. R. Lloyd read a paper upon the five days' sketching excursion to Broadway last July, illustrating his account with photographs and sketches made by the members and enlarged by means of the lantern. Ludlow is suggested as the sketching ground for next July, when it is hoped a good number of architectural students will join, the district being particularly rich in examples of old domestic buildings.

Northern Architectural Association.—The annual meeting of the Northern Architectural Association was held in the Meeting Room, Art Gallery, Newcastle. Mr. James Oswald (president) presided, and there was a good attendance. The hon. secretary (Mr. A. B. Plummer) read the annual report which recorded the increasing prosperity of the Association. Since the last annual meeting five members, twelve associates, and twelve students had been elected; and the membership now numbered 45 members, 57 associates, and 37 students. The following had taken the prizes in the students' competitions for measured drawings and sketches: Messrs. G. C. C. H. Crawhall, R. P. Twizell, S. M. Mould, and G. Brumell, junr. Fifteen members of the Association entered for the Cambridge University Extension Examination, and all passed. Mr. S. M. Mould, Mr. J. L. Nicholson, and Mr. M. G. Martinson had been awarded prizes in other competitions. The following members had passed the examinations of R.I.B.A.: Preliminary, Mr. S. M. Mould and Mr. A. K. Tasker; Intermediate, Mr. S. E. Barrow and Mr. R. H. Morton; Final, Messrs. F. E. Coates, C. S. Errington, J. C. Maxwell, and J. Spain. The Council were glad to be able to state that almost all the older and leading members of the profession in the two counties were now connected with the Association. One new member, five associates, and six students were elected members of the Association.

Liverpool Engineering Society.—The fortnightly meeting of this society was held on Wednesday evening at the Royal Institution, Professor H. S. Hele-Shaw, M.Inst.C.E., presiding over a large attendance. The evening was devoted to the discussion upon a paper read by Mr. D. B. Morison, M.Inst.M.E., of Hartlepool, at the last meeting on "Marine Evaporators," in which he dealt with the general advantages of marine evaporators, and described in detail the arrangements of the various classes of evaporators now on the market. A large number of members took part in the discussion.

For the new schools to accommodate 200 children, which the Llangoed School Board have decided to erect, Mr. Glynne Davies, Bangor, has been appointed architect.

"Architectural Ironwork: Constructive and Decorative. A Series of Instructive Papers for the Artist and Worker." The continuation of Chapter VI. is held over until next week.

SAWDUST.

S. PETER'S ROMAN CATHOLIC CHURCH, Lancaster, together with the Convent, Presbytery and Schools, generally considered to be the best work of the late Mr. E. G. Paley, will shortly have new Boys' Schools added to accommodate 350. Plans are being prepared by Messrs. Paley, Austin & Paley, architects, at a proposed cost of £4,000. Additions are also being made to the Presbytery at a cost of £2,000 from plans by the same firm.

We understand that Mr. C. J. Ferguson, architect, of Carlisle, is about to start for Athens to make an investigation into the damage done to the Parthenon by the recent earthquake.

The various schemes prepared by the Borough Surveyor for utilising the Commercial Hotel in Market Square for providing additional municipal offices and police accommodation at Lancaster, have been considered, and the Surveyor is instructed to furnish an estimate of the cost of carrying one of such schemes into effect.

At a recent special meeting of the Lancashire Asylums Board, the Rev. C. T. Royds said the plans of the building for the new asylum at Winwick had been much altered and modified, with a view to the accommodation of chronics and imbeciles, sick and infirm, of acute cases which might arise among in-patients, and of epileptics. They had had a communication from the architects to the effect that this would mean a saving of from £2,000 to £3,000.

The Board of Guardians, at a recent meeting, decided on a series of alterations in the arrangements of the Bath Workhouse, intended to remedy the defects in its accommodation disclosed a little time ago. It was resolved to enlarge the infirmary, and the laundry arrangements having been condemned as very defective, it was decided to build a new laundry. The total cost was estimated at about £6,000.

The Glasgow Town Council has decided upon the erection by the corporation of tenements of shops, warehouses, and dwelling-houses in Trongate, King Street, and Parnis Street, to the aggregate value of £29,000.

From plans prepared by Mr. J. William Trounson, of Clarence Street, Penzance, the Bible Christain Chapel, at Hea Moor, is about to be renovated and enlarged, and a new schoolroom will also be added.

In the district of Piacenza, a village called Bollara has been completely buried by an enormous landslip nearly a mile in extent. Fortunately the movement of the mountain was noticed in time for the inhabitants to escape.

It is with regret we record the death of Mr. Ernest Turner, F.R.I.B.A., from heart disease, in his 51st year. He had been for twenty years a member of the Council of the Sanitary Institute, and he was almost from the foundation one of the judges of the exhibitions held in connection with the annual Congresses of the Institute. He was the chairman of the Council, and presided at the Council meeting only two days before his death. Mr. Turner had a large consulting practice in connection with the reconstruction and drainage of provincial hospitals, schools, and country mansions.

The restoration of Portobello Parish Church, which was damaged by fire towards the end of last year, has been completed. The internal plan remains as before; but an entire change of decoration and the addition of leaded cathedral glass, give the interior quite a different appearance from what it had. The work has been carried out from plans by Mr. J. Macintyre Henry, architect, Edinburgh, at a cost of about £900.

The working men's club at Gainsborough is about to be enlarged at an estimated cost of between £600 and £700.

COLONEL DURNFORD, an inspector of the Local Government Board, recently held a series of inquiries into applications of the Manchester City Council to borrow sums amounting in the aggregate to more than £260,000. Of this, £100,000 was for the extension of the electric light system in the city, £100,000 for works of sewerage and sewage disposal, £50,000 (in excess of present borrowing powers) for the building of the Technical School, and £10,000 for the replacing of defective drains in the poorer parts of the city.

The Parks Committee of the Birmingham City Council has been authorised to provide a park-keeper's lodge and other accommodation at Adderley Park, at an estimated cost of £600.

The Bill promoted by the London County Council to empower them to rebuild Vauxhall Bridge upon the site of the existing bridge, came for consideration before a Select Committee of the House of Commons, and has been referred to the Unopposed Bill Committee.

New Schools are to be erected in St. George's Parish, Wigan. Sir Francis S. Powell, Bart., M.P., has promised to bear the whole of the cost, which is estimated at about £2,000.

The Merchant Taylors' Company has granted the sum of £525 to the St. Thomas's Hospital Special Appeal Fund for opening closed wards, which will be paid in annual instalments of 100 guineas.

Plans have been prepared for a proposed new infirmary in connection with the workhouse at Wakefield, the cost of which is roughly estimated at £25,000.

At a special meeting of the Rotherham Rural District Council on Monday last, Mr. R. Bradbury, of Chapel-en-le-Frith, was appointed surveyor of highways at a salary of £250 per annum. The applications numbered 180.

The pumping station and the new drainage works for the borough of Grimsby, which have just been carried out at a cost of £32,000, were formerly opened last week by Alderman George Doughty. The cost of the pumping station has been £4,500.

The new chapel at Blackley of the United Methodist Free Churches was opened last week. The chapel has cost about £2,600, of which over £2,000 has already been raised.

The Edinburgh and Leith Gas Commissioners have decided to re-roof a portion of their Edinburgh works at a cost of about £3,400.

The design sent in by Messrs. Campbell, Douglas & Morrison, Glasgow, for the Sandeman Free Library, Perth, has been awarded first place, and those by Mr. A. Grainger Helton, Perth, and Mr. Brown Watt, Aberdeen, equal. The cost of the Library is estimated at £10,000.

The plan prepared by Mr. H. Green for the proposed new school in East Street, Okehampton, has been adopted by the School Board. Mr. F. Yeo has been appointed architect for the Fowley Down School, for which he has prepared plans, the estimated cost being £297.

The tender of Mr. M. Otto, Lincoln, has been accepted for the construction of the new Unionist Club in Silver Street, Lincoln, the contract price being £5,500. The architect is Mr. W. Watkins, Lincoln.

DURING the recent heavy gales, the leaden roof of the Banqueting Hall, Whitehall, now housing the Royal United Service Institution, was rolled up like paper.

The foundation-stones of a new Sunday school, in connection with Richmond Hill Wesleyan Chapel, Leeds, were laid last week. The cost of the new building will be £2,800.

An enquiry has been held relative to the County Council's application for sanction to borrow £127,280 for the provision of a West Sussex County Lunatic Asylum. The conditional contract with Messrs. Longley, of Crawley, for erection of the building has been approved by the Secretary of State.

The London County Council have granted, as a loan, £2,600 to the Fulham Library Commissioners to defray the cost of erecting a branch library in Wandsworth-road.

Plans prepared by Mr. H. J. Snell, architect, Plymouth, for the extension of the Laira School premises, Egg Buckland, have been approved by the School Board.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BRADFORD, YORKS.—For the erection of a warehouse, Clifton-street, Manningham-lane, Messrs. Empsall and Clarkson, architects, 55, Tyrrer-street, Bradford:—
Booth, C., and Sons, Bradford, masonry ...
Deacon, J., Shipley, joinery ...
Taylor and Parsons, Bradford, ironwork ... £3,000
Wood, Job, Bradford, plumbing ...
Taylor, A., Eccleshill, plastering ...
Nelson, T., Bradford, slating ...

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO. Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO
TILES MOSAIC
FAIENCE
Poole Dorset

The Builders' Journal is published at
3 a.m. on Tuesday mornings, and should
be obtained from any Newsagent in the
Kingdom the same day.

BARKING, ESSEX.—For new board school, cooking centre,
and caretaker's cottage, North-street, for the Barking School
Board. Mr. C. J. Dawson, F.R.I.B.A., Barking, architect.
Quantities by Messrs. Gardner, Son and Theobald:—

Oldridge and Sons	£28,847	0	0
Boyce, T.	26,721	0	0
Stephens, Bastow and Co.	25,899	0	0
Foster and Dicksee	24,729	0	0
Holland and Hannen	24,470	0	0
Gregar and Son	24,359	0	0
Reed and Son	24,332	0	0
Kirk and Randall	23,860	0	0
Coxhead, F. J.	23,796	0	0
Watson, W.	23,435	0	0
Holliday and Greenwood	23,146	0	0
Lansdowne and Co.	22,771	0	0
Rider and Sons	22,760	0	0
Holloway Bros.	22,615	0	0
Mowlem and Co.*	22,194	0	0
Shepherd, W.	22,016	0	9

* Accepted, subject to sanction of Education Department.

Bournemouth.—For erecting and completing new infants'
school, cloak-rooms, latrines, &c., at the Boscombe British
Schools, Bournemouth, for the committee. Messrs. Lawson
and Donkin, Yelverton-chambers, Bournemouth, architects
and surveyors. Quantities supplied by architects:—

Elkins	£1,163	0	0
Whittaker, S.	1,025	0	0
Chinchen, W. J.	973	0	0
Medus, G.	887	0	0
Entwistle and Cox	880	0	0
Mudge, H.	875	0	0
Walden Bros.	870	0	0
Jenkins and Son	869	0	0
James, G.	860	0	0
Hoare, W.	843	0	0
Hoare, F., and Son	835	0	0
Hammett, F.	831	0	0
George and Harding	825	0	0
Dean, T.	818	0	0
Eaton, J.	804	0	0
Hayward and Son	800	0	0
Burt and Vick	769	0	0
Lucas, J. W.	768	0	0
Smith, H. (accepted)	755	0	0

All of Bournemouth.

Reading Cases may be had on application to
the Manager. Price, 2s. each.

METAL
CASEMENTS of
every description
GLASS ROOFING
Shelley & Co's & Hopes Patents

HENRY 55
HOPE ST.
BIRMINGHAM
LONDON, 13, King St
Cheapside.
MAN—
—CHESTER & Exchange
Arcade.

Brixton.—For the erection of stabling and coach-house
(Section A) at Dalberg road, Brixton, for Mr. A. Sholl.
Messrs. Treleaven and Payne, 18, Acre lane, S.W., and 8,
John street, Adelphi, W.C., architects and surveyors:—

Jones	£464	0	0
Smart	436	10	0
Hammond	347	10	0
Maxwell Bros., Brixton (accepted)	345	0	0

CANTERBURY.—For restoring the Chancel of Holy Cross
Church, for Mrs. Maloney. Mr. E. P. Loftus Brock, F.S.A.,
architect:—

Lovell and Sons	£275	0	0
Wise, J. J.	271	0	0
Bateman, H. W.	270	0	0
Adcock, W. J.	268	0	0
Wilson, H. B.	263	0	0

CANTERBURY.—For the construction of roof to nave and
north aisle of St. Nicholas' Church, Ash, for the Vicar and
Churchwardens. Mr. Edwd. W. Fry, architect, St. Martin's
House, Dover. Quantities by architect:—

W. Judges	£689	0	0
G. H. Deane and Son	684	0	0
W. Cozens	639	0	0
E. B. Badcock and Massey	620	0	0
Martin	618	0	0
J. Busley, Ash (accepted)	600	0	0
T. H. Lovell and Sons	545	0	0
A. Elgar Nunn	517	0	0

HUCKNALL, NOTTS.—For erection of Primitive Methodist
Chapel and School. Mr. H. Harper, Market place, Notting-
ham, architect:—

Thomas, J. G.	£3,152	0	0
Vickers, J. H.	2,906	0	0
Youngman, G.	2,768	0	0
Munks, J. A.	2,725	0	0
Pillatt, G. A.	2,700	0	0
Savage, W.	2,650	0	0
Clay and Cartledge, Hucknall*	2,575	0	0

* Accepted.

ILFORD, ESSEX.—For new board school, cooking centre,
and caretaker's cottage, Cleveland-road, for the Ilford School
Board. Mr. C. J. Dawson, F.R.I.B.A., Barking, architect.
Quantities by Messrs. Gardner, Son, and Theobald:—

Oldridge and Sons	£27,329	0	0
Boyce, T.	25,406	0	0
Stephens, Bastow, and Co.	25,000	0	0
Foster and Dicksee	24,060	0	0
Hammond and Son	22,200	0	0
Rider and Son	22,047	0	0
Holliday and Greenwood	22,044	0	0
Coxhead, F. J.	21,997	0	0
Lansdowne and Co.	21,952	0	0
Watson, W.	21,858	0	0
Holloway Bros.	21,808	0	0
Holland and Hannen	21,808	0	0
Gregar and Son	21,516	0	0
Mowlem and Co.	21,260	0	0
Shepherd, W.	20,988	0	0
Kirk and Randall*	20,844	0	0

* Accepted, subject to the sanction of Education Department

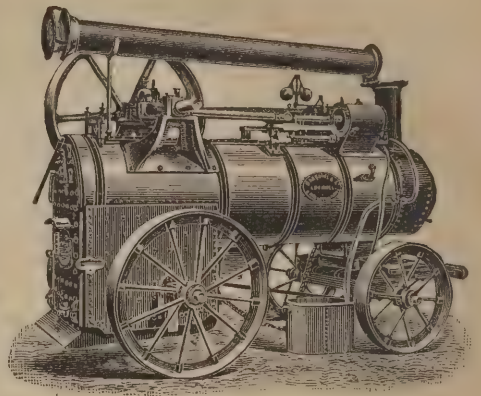
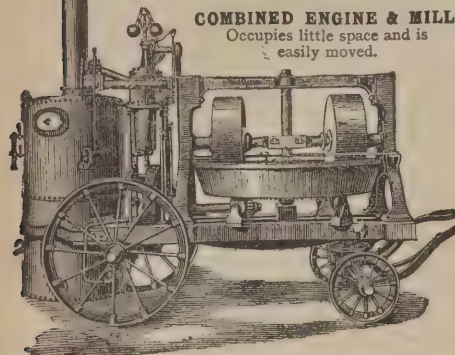
LONDON.—For the erection of seven houses at Glenwood-
road, Catford, S.E. Mr. H. Lewis Upham, architect
Silverdale, Sydenham, S.E.:—

McLoughlin	£3,620	0	0
R. Soper	3,575	0	0
Jones and Groves	3,250	0	0
Waddington and Co.	2,940	0	0
A. C. Hoile	2,730	0	0
R. H. Walker (accepted)	2,723	0	0

LONDON.—Alterations and additions at 58, Cadogan-place,
for W. B. M. Bird, Esq. Mr. Percy D. Smith, architect, 1,
Verulam-buildings, Gray's Inn. Quantities by Mr. S. G.
Goss, 16, John-street, Bedford-row, W.C.:—

Cole, Chas.	£1,987	9	0
Bradley, W.	1,726	0	0
Coils and Sons	1,523	0	0
Patman and Fotheringham	1,521	0	0
Chessum and Sons (accepted)	1,460	0	0

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

LINCOLN.—For erection of Constitutional Club at corner of Silver-street and Broadgate. Mr. W. Watkins, architect:—
M. Otter and Co. (accepted) ... £5,500 0 0

LONDON.—For rebuilding premises in Fulwood's Rents, Holborn, for Mr. H. T. Culliford. Mr. F. T. W. Goldsmith, architect, 1, Verulam-buildings, Gray's Inn. Quantities by Mr. J. F. Bull, 30, Bedford-row:—

Oldrey and Sons	...	£3,587	0	0
Lascelles	...	3,279	0	0
Earl and Sons	...	3,066	0	0
H. J. Williams	...	3,065	0	0
J. Johnson	...	3,009	0	0
Creton and Co.	...	2,989	0	0
Godfrey and Son	...	2,956	0	0
Thompson (too late)	...			

LONDON.—For the erection of stabling for forty horses, farrier's shop, forage store, harness room, and manure pit, at Lansdown-hill, Lower Norwood, S.E., for the London Southern Tramways Company. Mr. J. R. Manning, M.S.A., architect, Milkwood Estate Office, Herne Hill, S.E. Quantities by the architect:—

F. and H. F. Higgs	...	£1,111	0	0
J. Hooper	...	1,102	10	0
Holliday and Greenwood	...	1,073	0	0
T. H. Rodwell	...	1,065	1	6

LONDON.—For alterations to the "Victoria" Tavern, Hackney Wick, for Mr. Charles Ellidge. Mr. Horace M. Wakley, architect, Adam-street, Adelphi. No quantities:—

Edwards and Medway	...	£997	0	0
Hawkins	...	969	0	0
Fritchard and Kant	...	923	0	0
Stevens Bros.	...	917	0	0
Shepherd Bros.	...	898	0	0
Hood, 471, Bethnal Green-road	...	887	0	0

* Accepted.

MIDDLESBROUGH-ON-TEES.—For making new roads and sewers on the Tofton Park Estate, Linthorpe, for the National Freehold Land Society, E.C. Arthur Newsome, M.S.A., Architect and Surveyor, Middlesbrough:—

Goodall Bros.	...	£338	15	1
J. Pounder and Sons	...	292	10	0
Dixon	...	189	19	8
Hunt	...	182	19	3
Burrows (accepted)	...	149	10	0

Architect's estimate, £128.

MIDDLESBROUGH-ON-TEES.—For the erection of Wesleyan Minister's house, Middlesbrough, for the building committee of same. Arthur Newsome, M.S.A., architect, Middlesbrough:—

Accepted Tenders.

J. Pounder and Sons, brick and stone.	
D. Patterson, plasterer.	
Wm. Prest, joiner.	
E. Spence, plumber, &c.	
L. Taylor, painter.	
Mascall, slater.	

Total of Tenders	...	£646	7	0
Ranges, &c.	...	50	0	0

£696 7 0

Architect's estimate, £700.

NEWPORT.—For additions, Stow Hill Schools, for the Newport, Mon., School Board. Mr. Benj. Lawrence, architect:—

Moore, J.	...	£1,975
Westcott, T.	...	1,807
Reed, C. H.	...	1,800
Firbank, J. H.	...	1,664
Morris, A. T.	...	1,640
Jenkins, J.	...	1,625
Diamond, T. G.	...	1,600
Linton, J.	...	1,599
Price, W.	...	1,590
Davies, J.	...	1,549
Jordan, E. C.	...	1,545
Morgan, A. S., and Co.	...	1,499
Parfitt, D. (accepted)	...	1,480

All of Newport.

NEWPORT (Mon.).—For pulling down and rebuilding Nos. 142 and 143, Commercial-street, Newport (Mon.), for Mr. Charles Collier. Mr. F. R. Bates, architect, 4, Commercial-street, Newport. Quantities by architect:—

Locke, Charles	...	£3,255
Wilkins, Geo.	...	3,210
Diamond, T. G.	...	3,096
Linton, John	...	2,999
Richards, Edwyn (accepted)	...	2,990

(All of Newport).

ROMFORD.—For rebuilding the Coach and Bell Inn. Mr.

A. T. G. Woods, architect:—				
Dowsing and Davis	...	...	...	£2,155
Rogers and Robson	...	...	...	2,105
Hammond and Son	...	...	...	2,065

SOUTH OSSETT.—For building Christ Church Infants' School. Messrs. John Kirk and Sons, architects, Dewsbury. Accepted Tenders.

R. Oldroyd, Ossett, mason.	
W. and E. Whitehead, Ossett, joiner.	
W. Haigh, Ossett, plumber.	
T. Brear, Dewsbury, slater.	
R. W. Clegg, Ossett, plasterer.	
H. Sanderson, Ossett, painter.	

COMPETITIONS. TO ARCHITECTS.

DESIGNS and ESTIMATES are invited by Mr. N. MILLER, of 95, Fishergate, Preston, Lancashire, for a proposed fireproof block of Shops, Offices, two fully-licensed Houses, &c., cost not to exceed £50,000, on an area of about 2,500 square yards.

Premiums of £150, £100 and £50 are offered (in the adjudged order of merit) for the three designs which are selected as the most suitable, and which three designs will become the absolute property of Mr. MILLER.

The assessor to be an architect of eminence, and familiar with commercial property.

A plan of the site, with instructions to Architects, can be obtained from Mr. MILLER, on payment of £1 is., which will be returned to those sending in bona-fide designs.

All drawings, plans, sections, &c., must be sent to the Borough Engineer's Office, Town Hall, Preston, the name and address of the designer to be in a sealed envelope, enclosed with plans, &c., which will be respectively numbered, but no name, device or motto must be visible on wrapper. The plans must be sent in not later than May 27, 1895.

TO ARCHITECTS.

The Managers of the Llanelly Intermediate and Technical Schools are desirous of obtaining, by competition, PLANS (with Elevations), accompanied by Specifications and Estimates, for their proposed schools.

Particulars, conditions, and plan of the site may be obtained from the undersigned on payment of £1 is., which will be returned to each applicant submitting a design.

Drawings, &c., to be sent in by May 15th, 1895.

FRED. NELSON POWELL, Clerk.

TO ARCHITECTS and SURVEYORS.

Plans, &c., are required for a Ladies' College, to be built within ten miles of King's Cross.

The architect and surveyor whose plans are accepted will be engaged to superintend the erection of the building upon the usual scale terms.

Architects wishing to submit plans, &c., for approval may apply for particulars on Wednesday, April 3, between the hours of 10 a.m. and 5 p.m., at Parkfield Ladies' College, High Barnet, London, N.

TO SANITARY ENGINEERS.

The Parochial Committee of Great Ayton offer a PREMIUM OF TWENTY-FIVE GUINEAS for such SCHEME as shall, in the opinion of the Committee, meet their requirements for the drainage of the village and disposal of sewage, including plans, sections, estimate, and report. For particulars apply to the Clerk:—

JOHN DIXON.

Great Ayton R.S.O., Yorkshire.

CONTRACTS OPEN.

TO BUILDERS AND CONTRACTORS. The London County Council is prepared to receive TENDERS for ERECTING ONE TIMBER SHELTER at Clissold Park and Two at North Woolwich Gardens.

Persons desiring to submit Tenders may inspect the drawings and obtain the specification, bills of quantities, form of Tender, and other particulars at the Architect's Department, County Hall, Spring Gardens, S.W., upon payment of the

sum of Ten Shillings. This amount will, after the Council or its Committee has come to a decision upon the Tenders received, but not before, be returned to the tenderer, provided he shall have sent in a bona-fide tender, and shall not have withdrawn the same.

Tenders must be upon the official forms, and the printed instructions contained therein must be strictly complied with. Tenders are to be delivered at the County Hall in a sealed cover, addressed to the Clerk of the London County Council, and marked "Tender for Park Shelters."

No tender will be received after TEN a.m. on TUESDAY, the 23rd day of APRIL. Any Tender which does not comply with the printed instructions for Tender may be rejected.

The Council does not bind itself to accept the lowest or any Tender, and it will not accept the Tender of any person or firm who shall on any previous occasion have withdrawn a Tender after the same has been opened, unless the reasons for the withdrawal were satisfactory to the Council.

H. DE LA HOOKE,

Clerk of the Council.

Spring Gardens, S.W., March 27, 1895.

CARDIFF GAS - LIGHT AND COKE COMPANY.

TO BUILDERS AND CONTRACTORS.

The Directors of the above Company are prepared to receive TENDERS for the RECONSTRUCTION of the Company's OFFICES and SHOWROOMS, Bute-street, Cardiff.

Plans and specifications may be inspected, also forms of Tenders, and bills of Quantities obtained on application to Mr. HENRY MORLEY, Engineer, Gas Works, Cardiff, upon payment of Two Guineas, which will be returned on receipt of a bona-fide Tender.

The contracting party will be required to provide two sureties to the amount of £500 each.

Sealed Tenders, endorsed "New Offices," and addressed to the Chairman of the Company, must be delivered to the undersigned not later than TWELVE o'clock noon, on FRIDAY, APRIL 5th, 1895.

The Directors do not bind themselves to accept the lowest or any Tender.

Gas Offices, By order,
Bute-terrace, Cardiff, G. CLARRY,
March 16th, 1895. Secretary.

BUILDERS desirous of TENDERING for BUILDING a small BLOCK of FLATS in Bloomsbury, are requested to apply to ERNEST J. W. HIDER, Architect, 118, Southampton Row, W.C.

SMOKEY CHIMNEYS & DEFECTIVE VENTILATION.

THE "DULCE DOMUM" CHIMNEY TOPS & VENTILATORS (Downes' Patent).

The only Chimney Top which can be Easily Swept with the Ordinary Apparatus without being damaged. A Positive Preventative of Down-Draught, so Constructed that it Creates a Continuous and Powerful Up-Draught. Simple in Construction having No Movable Parts, Nothing to Oil or Repair. Cannot Get Out of Order. Strongly Made in Galvanised Iron. Once Fixed will Last for Years. Applicable also for Ventilating Public Buildings, &c.



Builders, &c., testimonials can be seen and prices obtained at the Patentee's Office:—

11, THE PARADE, Lewisham High Rd.,
New Cross, LONDON, S.E.

The Builders' Journal.

Vol. I., No. 9.

Tues., April 9, 1895.

ILLUSTRATIONS.

The Temple of Neptune at Pæstum	129
Heywood Municipal Technical School: Messrs. Woodhouse & Willoughby, Architects	131
Salford School Board Offices: Messrs. Woodhouse & Willoughby	133
Roman Tools found at Silchester	135
Portrait of Mr. T. J. Bailey	136

Lavender Hill Schools: Mr. T. J. Bailey, Architect ..	136
Plough Road Schools, Lambeth: Mr. T. J. Bailey ..	137
Hugh Myddleton Schools, Clerkenwell: Mr. T. J. Bailey	138
Ditto. South Elevation; Mr. T. J. Bailey	139
Design for a Seaside Bungalow, by Cedric	140
Ground Plan and Elevation of ditto	141

CONTENTS.

Small Dwellings Wanted	129
The Morality of Art	129
No Dinner and some Decoration	130
The Greek Temple of Pæstum	130
The New Charter House of Durham Cathedral	130

Pictures in Whitechapel	130
The Institute and the A.A.	131
Lightning-Rods	131
Bricks and Mortar	132
Men who Build, No. 9—Mr. T. J. Bailey ..	136
Suggested Economies in the Manufacture of Iron	138

Artisans at Work	139
A Poet on Peterborough Cathedral	140
The Builders' Journal Competitions	140
Awards of the Assessor, Mr. Aston Webb	141
Architectural Ironwork	142
Trade and Commerce	143
Society Meetings	144

The Builders' Journal.

Small Dwellings Wanted!

DOES the builder always know what to build? A good many people have begun to doubt it, for building has become so much a matter of fashion that the moment an enterprising speculator puts up a little novelty or quasi-novelty in domestic architecture, the trade rushes and ruins the idea. Disused brick-yards and suburban sites grow into prospective gold fields,—so general is the scramble,—and the crash is almost equally inevitable. Take what we may describe as Flat Fever. A little while ago the builder could not soar high enough towards heaven. We have been guilty of encouraging the bungalow, which is a lowly and more earthly thing, and perhaps our view is limited, but we do know that these flats tower aloft even in "undesirable" neighbourhoods, with the result that you may have the privilege of gazing down on your neighbours' back yards. It is all very interesting, no doubt—the general squalor of a London back—but we prefer to take a shorter view of life, and so we have some sympathy with the people who are writing to the daily papers complaining of their inability to obtain a nice little—that is to say, a comfortable, reasonably rented—house. We are prone to bar the Bijou Residence and the Cottage Ornée, for these remind us of a Doll's House and curiously of Ibsen's "Master Builder." In parenthesis, we might point out that the "Master Builder" was mad, but his British prototype is, at his best, a sane, shrewd, satisfying creature. It is only when he becomes speculative that he runs to seed—and bankruptcy. Two widely distant and distinct demands for small dwellings were voiced last week, one in a little manufacturing town away in Yorkshire, where a firm of manufacturers complain of an insufficiency of houses for their workpeople, and the other in the London Press, the latter the more suggestive in remedy. As a rule the builder keeps a pretty close eye on the manufacturer and is ever prepared, upon

reasonable evidence, to run up rows of cottage property. In London, on the other hand, the small professional man is more and more beset with difficulties in his endeavour to find the house at once agreeable to his liking and to his purse. As a correspondent points out, flats are now so dear—where happily or conveniently placed—and have such a limited number of rooms, that they do not meet the want. Yet, all the time, there are hundreds of good-sized houses empty. You have only to go through the roads in West Kensington and South Kensington to see the number of fine houses to let. Why should not some bold-spirited landlord try the policy of dividing a house in sets of chambers? The great black signs with their white letters of woe—To Let on Lease, For Sale—are hideous enough and

smash by Balfour's appearance in the dock, beyond the moral restitution, but the terror of his example should serve to deter men prone to gamble with the hard cash savings of others in gigantic schemes. Nor are we going to dwell upon the even more darksome end of Oscar Wilde. We note that many journals have already begun to refer to him as "the man Wilde." So it was with J. Spencer Balfour; the flatterers who fed and fauned the man, the partisans who had regarded him as a pillar in the Liberation movement, suddenly remembered that his name was Jabez, and "Jabez" it became. It is a cheap way of showing contempt, and one, in neither case, commensurate with the crime. We have little regard for the jerky and parrot-like condemnations of the Journals that fed Wilde's vanity, quoted his cheap insincerities and generally bolstered up his spurious fame. The parading and paraphrasing of this and that *poseur* in Literature, Art and the Drama have become the very curse of artistic life, and those that encouraged Oscar Wilde in his audacious mendacities should reckon up with their own conscience to-day. But what we are glad and thankful of is that Oscar Wilde's fall has struck a blow for the loftier ideals of Art. The proceedings at Old Bailey will not have been in vain if the public



THE TEMPLE OF NEPTUNE AT PÆSTUM.

have become a positive plague to the eye in many streets in the West End.

The Morality of Art.

It is a tragic coincidence that the two men most prominently before the public last week should be men who had the audacity to associate themselves with Beauty in Art and the Art of Building. We shall not go over the Balfour case, beyond saying that if there be any power in the arm of Justice, that man should be punished. Tardy, indeed, has been his home coming, and reluctant to-day as ever, taking advantage of every quip and quirk to dally with departure. Yet it is good to know there is strength enough in English law to bring Balfour back across the far seas that have meant safety so long. No restitution may result to the sufferers in the Liberator

has undergone an awakening to the pernicious philosophies and saturnalian sagacities that have been sapping the honest growth of English effort in all the Arts. Long ago, it seems, since the inane and vapid craze of sunflower worship took a crazy section of society by storm. For ourselves we are not staggered by the end, an end whose climax is a green carnation and a blasted reputation in the dock. It would be idle to deny that these creeds and crazes did not contaminate the Art side of things. Architecture took a cue and pandered to *Æsthetics*; in domestic decoration we had the grotesque thrust upon us; there arose faint odorous murmurs also of new Cults and Schools. Happily a Cult is not synonymous with Culture, and the solid public is yet wary of the New Moralities that have been preached in and out of season the last few years. We trust that irrespon-

sible Immoralists will either be galvanized into a healthier standpoint by this utter and startling collapse of Oscar Wilde, or will receive so serious a shock that the World may neither see nor hear them more. *Anything* will not pass muster for Art in England, tawdry success to the contrary, and there is still hope for the robust Arts and Letters that have been emasculated in the exotic heats and atmospheres of recent tendencies. Art can be moral and beautiful. Let us have done with the despicable doctrine that asserts Art to be, of necessity, immoral.

No Dinner and some Decoration. SHOULD Freemasonry forego its banquets for one year in order that St. Paul's Cathedral may benefit in decoration? The proposal is a bold one, and Mr. Woodward, architect, is responsible for it. We are a little amazed at Mr. Woodward's audacity, though we do not hold banquets to be the chief bulwark of Masonry. The representations of unfed outsiders to that effect may be taken at a heavy discount. Freemasonry does believe in the flesh-pots of this World, it is true, and so do all healthy bodied and wholesome minded men. Rob friendship of the hearty beefsteak, or the dainty *entrée*, and you have a cold, colourless intercourse, devoid of comradeship, with a tendency to pernicious nips, vile cigars and cheap drinks. So much, therefore, in appreciation of Freemasonry's substantial board. Whether it is necessary to strike a blow at the banquets at all, is a moot point, for Masons are, avowedly, a rich lot and not ashamed to own it. The Grand Superintendent of Works (not at St. Paul's), wrote to the London *Standard* yesterday, asserting that Masons would, he felt sure, be willing to associate themselves with the work of decorating "the finest Protestant Cathedral in the World," without going into annual fasting. In the Grand Superintendent's opinion, Mr. Woodward's suggestion was calculated to "give those outside the Order an erroneous impression that Freemasonry exists and flourishes upon such gastronomical and baser influences!" We admit the gastronomy but question the baseness. Is not a mere man—let alone a Mason—more open to attack, more ready with true deed, after he has dined? It has been said that a good cook is responsible for many good Christians, and Freemasonry is only another name for Brotherhood. Any way—and by whatever means—it will be a good thing if Freemasonry becomes associated with the decorative work of St. Paul's, and there would be something peculiarly fitting in this relationship of Masonry to Wren's masterpiece. In 1666, Wren was appointed Deputy Grand Master under Earl Rivers, and distinguished himself beyond any of his predecessors in legislating for and promoting the success of the lodges under his care. He was Master of the St. Paul's Lodge—now the Lodge of Antiquity—(of which the Duke of Sussex was a Past Master) and attended their meetings regularly for upwards of eighteen years. In 1685 he was elected Grand Master. These facts will appeal, we are sure, to the hearts and the pockets of Masons without any need of their being sent forth, upon Lodge nights, empty away.

THE GREEK TEMPLE AT PÆSTUM.

THE Temple of Neptune, at Pæstum, is said to be the most perfectly preserved Greek Temple in the World. It is sixty-three yards long and twenty-eight yards wide. At each end are six massive fluted columns, at each side twelve. Built of yellow travertine it has a deliciously soft mellow colour. All its proportions are delicately balanced and serenely harmonious. Once the scene of august ceremonies and brilliant life, it is to-day empty, abandoned, silent.

THE NEW CHAPTER HOUSE OF DURHAM CATHEDRAL.

INTERESTING DISCOVERY OF THE REMAINS OF THE GREAT APSE.

EARLY in June the new Chapter House in Durham Cathedral will be opened. The Chapter House has been built as a memorial to the late Bishop Lightfoot, by subscription. It is expected that an important Commemoration Service will be held. The work has been carried out from plans by and under the supervision of Mr. C. Hodgson Fowler, F.S.A., of Durham, by masons under the superintendence of the foreman, Mr. Ashley, there being no contract (except for wood and lead-work of roof, done by Messrs. F. Caldcleugh and J. Newby, of Durham, respectively). The cost has been between £5,000 and £6,000. The Chapter House, in its original state, was a very fine Norman building, completed 1133-1140, but the eastern half, under the direction of Wyatt, who considered it in a ruinous state, was, in 1796, pulled down and the remainder made into a square room with a flat ceiling. The keystones were taken out of the groined roof and the roof allowed to fall on to the floor, which, being formed mainly of grave-stones, was seriously damaged. The present work has been the restoration of the eastern half and the replacing of the groined roof over the whole building, the whole being covered by a flat-pitched deal roof covered with lead. The plan of the Chapter House is in the form of a parallelogram having a semicircular apsidal end, the internal dimensions being: width above wall arcade (Norman intersecting arches) 36 ft.; total length 78 ft., the apse being 18 ft. radius; height from floor to spring of groin 22 ft., ditto to apex of groin 43 ft.; the walls are 5 ft. thick; the groin-ribs are both plain and zigzagged with figure corbels to apse; the haunches of the groins have been filled with concrete. The Chapter House is lighted by seven Norman windows glazed in geometrical patterns. New carved oak doors have been inserted in the large west doorway, and a stone dais placed all round the inside. There will be placed in its original position at the east end a bishop's chair, which was discovered in the foundations of the 1796 wall. This chair was used from 1140 to 1791. Old groin ribs, window jambs, and other fragments and remains were found in the foundations, so that an exact restoration was possible.

The excavations which have just been carried out in the Cathedral have thrown light on the question of the exact form of the east end of the choir, as built by Bishop Carileph, in 1093. That the choir ended in an apse has always been known, but this apse, owing to some failure, threatened to become ruinous some hundred years after its completion, and was, with the east ends of the choir aisles, wholly removed when the eastern transept, or Chapel of the Nine Altars, was built in the second half of the 13th century. It has hitherto been thought by antiquarian authorities that the aisles were carried round the central apse to form an ambulatory, the usual plan in the great Norman churches of England; but the portions of the old terminations laid bare show clearly that the aisles ended square externally in a line with the chord of the great apse. Not only the foundation of the central apse has been discovered, but a part of the internal walling, including the square block on which stood a cluster of vaulting shafts, and one base of the wall arcade under the windows, exactly corresponding with the work now existing in the choir aisles. Besides the foundations of the square end of each aisle, those of a smaller apse have been found on each side. If these belong to Carileph's church, his aisles must have had an apsidal end internally, but certain indications have

led to the theory that these side apses belong to the Saxon Cathedral which preceded the Norman one and occupied the same site. It is hoped that further investigation may settle this point. The floor must shortly be relaid; but arrangements will be made by which all points of interest may still be accessible.

PICTURES IN WHITECHAPEL.

MR. MUNDELLA SPEAKS UP FOR THE NATIONAL GALLERY.

THE idea of showing the best pictures to the poor no longer seemed absurd, said Canon Barnett, at the opening of the 15th Annual Whitechapel Fine Art Exhibition. It did not raise a laugh as it did fifteen years ago, when he proposed to show the works of the best artists to those who were among the poorest and most ignorant. The human spirit had another victory. It was now recognised that if the wealthy got knowledge and joy by such means, the poor—being human, too—would also learn to live better by admiring what was beautiful. The poor—who were the majority—must learn to care for art if art was to survive for the service of the commonwealth. Mr. Mundella, who opened the Exhibition, said the work in regard to these picture exhibitions, which was started in Whitechapel fifteen years ago, had been extended to many other parts of the metropolis. He could not claim to be either an artist or a critic. He was only a plain man of business, and a man who in the turmoil of business had found in art the greatest solace, pleasure and instruction. Art had been to him the delight of his life from his youth, and it was increasingly so with increasing years. The place of art was of the utmost importance in relation to the everyday life of busy men. Contrasting the conditions and habits of the people of this country at the present time with those of three-quarters of a century ago, he claimed that much of the improvement was due to the influence of art, and that influence, which elevated and refined, was now brought to the very doors of the poor. Speaking of the establishment and history of the National Gallery, he commended to all those who visited European galleries the suggestion that immediately on their return they should visit their own National Gallery, and they would assuredly, he thought, admit that there was none so truly representative and none so free from mediocre pictures. He thought there was no gallery in the world where the pictures on the whole were of such high level as those of the British National Gallery.

THE new asylum which the Herts County Council propose to erect at St. Albans is to be constructed to accommodate 560 patients, instead of 400 as originally proposed, at an estimated additional cost of £15,000. The total cost is estimated at between £90,000 and £100,000.

THE interesting old gateway at Calais—at one time the principal entrance to the town—known as the Porte de Havre, is now being demolished, the site being required for a boulevard which is being made across the north side of the town, as a part of the extensive scheme for the naval and commercial harbour and other improvements being carried out at this port. The gateway was erected by Cardinal Richelieu in 1633, and has a drawbridge and portcullis.

THE new pier at Rhos-on-Sea is to be opened for promenade purposes during the Easter holidays. The pier, which starts from a point near the ancient fishing weir at Rhos, is a substantial structure of iron, about 1,400 feet long, and the cost of construction has exceeded £10,000. A scheme is on foot for connecting Rhos-on-Sea with Llandudno and Colwyn Bay by means of an electric tramway.

THE Church of St. John's, Egremont, has just had a new beautifully carved oak altar, designed by Messrs. Norbury, Paterson and Co., placed in memory of Miss Millett. The table is a gift.

THE INSTITUTE AND THE A.A.

WE do not wish to take from the merry little *A.A. Notes* the privilege of discussing the merits or demerits of the Institute Examinations, nor do we wish to gather unfairly to our columns the feverish communications which the opposite partisans politely fling at one another once a month within the little brown covers of the official organ of the Architectural Association. It would be a pity to rob our little contemporary of its charm, by taking it seriously, and we should be sorry to think that Mr. William White and his followers on the one hand, were more in earnest than Mr. Leonard Stokes and his followers on the other, so we can best serve the interests of our own subscribers by dropping all these factions and influences overboard, and by filtering the matter through the authority of our own opinion. We will begin by divulging a little "trade" secret. We have already published or prepared for publication, twelve "Men who Build," and, curiously enough, each of the twelve has given it as his opinion that you cannot determine the architectural competence of a man by examination. As to the definite value of the Institute Examinations the opinions of the twelve good men and true were about balanced, but all agreed that the examinations could do no harm. Three of the "men" frankly asserted that Fellowship of the Institute was of no earthly value to a practitioner; two did not think it was worth considering whether it was or not; seven thought generally that architects should become members, if they were able, if only for their own dignity and the dignity of their profession. But here come a most astounding fact—and one the responsibility of which we take upon ourselves, for we did not in any case obtain the fact by a direct question—the greater number believe the Architectural Association has done more legitimate good for architecture than any other professional Institution in England. Mr. Leonard Stokes will find unction in that.

We have no faith in the Angel of Destruction; our pet spirit is the Spirit of Advancement. We love the new because we reverence the old; we build up because we have no heart to pull down. The Royal Institute of British Architects is, perhaps, the most imperfectly manipulated Institution of its kind. It has upon it the thumb marks of two, or, perhaps, three men who by no means should have a tenth part of the power they appear to have. The influence should come from a body of men, powerful in resource, keen of perception, unflinching in determination; and there is very little of these things in Conduit Street. There are, however, cliques in the Institute, and the quicker the profession faces the fact and acts in wisdom's way the better.

The particular difference which, since the beginning of the year, has been agitating the minds of various correspondents in the *A.A. Notes*, is whether the examinations at the Institute are not sapping the educative faculties of the A.A., and, therefore, doing an irreparable injury to the minor body. We cannot ourselves see that the inference is proved. Mr. Stokes—in a letter in the current issue—says:—"In 1882 the Institute established its various examinations and almost immediately afterwards the Association found all its own classes practically abandoned . . . Twice within about ten years these Examiners ('Mr. Cates and his Brood'), have checkmated the Association in its attempt to train the young architect, and what will happen this time I cannot quite see." On the other hand, Mr. Phené Spiers—who in the March issue of the *Notes* answered another of Mr. Stokes' fireballs which appeared in the February number—says: "Were the Architectural Examinations

(of the Institute) to be suddenly stopped, within two or three years the Association would be wound up." What leads Mr. Spiers to this romantic conclusion? It is altogether ridiculous. In a private communication—a reply from a worthy correspondent to whom we referred several matters of fact—which is now before us, the writer says: "The subject is, perhaps, rather stale, but it must come to the front again now that the A.A. cannot work its 'New Scheme' as we call it—i.e., we cannot get the students to come to the classes and studios in any numbers. Mr. Lacy W. Ridge, the other day, was to have commenced a series of lectures on 'Professional Practice,' and not a single student could be found to attend them; and, on another subject, so good a man as F. R. Farrow lectures to one man. Of course, all this may be the fault of the classes and the A.A., but nobody has said so, or even hinted it, and I maintain, with Stokes, that (in the absence of any other evidence or theory) the Institute Exams. are to blame." All this is probable, but, as yet, there is no atom of proof, and we have a wonderful liking for proof. Between now and the appearance of our next issue

tions, and its papers, without being able to muster up one single little editorial comment, one way or the other—the Royal Institute of British Architects has but the merest misty existence. Nineteen educated men out of twenty have never heard of it. Thirty per cent. of the ablest architects, to their eternal shame be it said, don't recognise it. The Government of the country ignores it, and fifty per cent. of its members never go near it. And, as if to add insult to ignominy, it cannot even afford to house itself respectably. It appears to us that the place is covered with the dust of a sham respectability that wants ruthlessly sweeping away. We almost hunger for the "job."

(To be continued.)

LIGHTNING-RODS.

THE general principles to be kept in view in the application of lightning-rods are these: the rod should be made of the best conducting substance; it should be continuous, and have great electrical capacity, and the metal of which it is composed should expose as great an extent of



HEYWOOD MUNICIPAL TECHNICAL SCHOOL: MESSRS. WOODHOUSE AND WILLOUGHBY, ARCHITECTS.

we will endeavour to collect a little. In one of our pigeon holes, neatly tied up with red tape of a very brilliant colour, is a mass of facts connected with the Institute. The time has come when the higher elements of architecture should be more strongly represented on the Council. And we are bound to say that, with few exceptions, the higher elements are to be found with the new school. We should like to see Ernest George, John Belcher, Brydon, Graham, Carey, Mountford, Stokes, and others like them, on the front benches. It might be very shocking to some of the grey beards of Conduit Street to see several of these "new" men to the fore, but how the pretty faced Goddess of Architecture would smile with delight. Who knows but that, if this were so, the men who now walk past the doors of the Institute, without so much as a glance of recognition, would peep in, and presently enhance its dignity by membership. It is monstrous for men to raise a voice against the existence of the recognised Institution of their profession. The Institute fails in mighty measure. Beyond its own members and outside the professional press—which year after year reports verbatim its transac-

surface as possible, consistently with strength and durability. Its upper extremity, which should project freely into the air, should be pointed, and may be triangular, somewhat similar to a bayonet. In cases where metallic vane-spindles or other points exist, it may commence from these. It should be led as directly as possible along the building, and be fixed to its walls. It should terminate immediately under the surface of the ground in two or more branches, passing out in any convenient direction; these branches should, if circumstances permit, be connected with a spring of water, a drain, or some other conducting channel. It should be applied immediately to the part to be defended, and not at a short distance from it, and should be so applied that a discharge of lightning falling on the general mass could not possibly find its way to the ground by any circuit of which the conductor did not form a part; that is to say, the conductor should be united with all the great masses of metal in its vicinity which offer other possible lines of discharge: by this arrangement no more of the discharge could pass in the direction of such masses than could be transmitted without damage.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
9th April, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE operations this year in the Test Work for the Unemployed are not at present at Abbey Mills, where the remaining work can be done at any time, but at Lower Sydenham, where the employment is of a more urgent character. There the London County Council have obtained a lease of ten acres of land, formerly a brickfield, which they propose levelling and raising, with a view to letting them out as working men's allotments. The land is contiguous to the gas works, and is surrounded by a population suitable for such a scheme. A number of applications for allotments have already been received—in fact, far beyond the number of tenants the land will accommodate. The work is admirably suited for the Committee's purpose, providing good stiff digging, wheeling, and road-making. The terms of employment for the men engaged are 6d. per hour for eight hours daily. Each man helped by the Committee in the purchase of stock or plant leaves 1s. per day in their hands towards the scheme for his benefit. The men employed are doing very well this year, being a better class—taking them all round. Something may yet come of the experiment.

"RESTORATION" is, in the opinion of some alarmists, threatening Peterborough Cathedral. Mr. William Morris, in his letter to the Press, which we print elsewhere, raises a warning voice. Mr. Morris pleads that "every device which skill and knowledge can suggest shall be exhausted before rebuilding be even thought of," and that "as little disturbance of the surface of the building shall take place as is possible, and that consequently no merely decorative features shall be reproduced in imitation of the old work." This is not the first time that he has drawn attention to the condition of the Cathedral. Writing five years ago, when it was rumoured that the west front was to be repaired, he said that it was in excellent repair, and that even if structurally unsound it could be saved without rebuilding. He also asked the very pertinent question: "Before we give our money to the Restoration Committee, who is to assure us of the truth as to the stability of this great work of art?" In the case of this "magnificent portico of Early Pointed work . . . unique in this country, a miracle of grace and beauty," there is perhaps little reason to fear that the Cathedral authorities will be over ambitious. The Cathedral authorities have not only to preserve their building, but to set a good example to others similarly situated. If the west front can be repaired it must be done with reverence.

Is not this a record? The North British Railway line, which terminates at present at Clydebank, is being extended to join the

main line at Dalmuir. The extension passes under the main line a short distance to the east of Dalmuir Station, and, the other Sunday, within the short space of twenty hours, the embankment was cut through, a concrete arch erected, and the permanent way restored to its normal condition for traffic. At two o'clock on the Sunday morning 200 men were started on the work, and as it was impossible in the limited space for all the men to be engaged at once, they worked in relays. The work done between two a.m. and 10 p.m. on Sunday embraced the handling of over 2,000 tons of material. The embankment was dug through to the extent of 36 feet in breadth and length, and to a depth of 15 feet. In six hours 600 cubic yards of earth were excavated. A centre was then formed on the earthwork, and about 190 cubic yards of concrete were laid to form the arch, after which the earth was filled in and the line restored. And after this it is stated that the workmen had two hours to spare!

At the Sheffield School of Art Dr. H. C. Sorby, F.R.S., recently lectured on the "History of Some of the Animal Forms met with in Early Art." Dr. Sorby described the development of scorpions, cockatrices, snakes, sphinxes, hawks, lions, centaurs, griffins, and dragons, through the periods of Egyptian, Chaldean, Assyrian, Greek, Byzantine, and Norman Art into mediæval times. The lantern slides, many of them drawn from originals by Dr. Sorby himself, represented examples at the British Museum, Orford, Worcester, Malvern, Beverley, and York. The whole lecture might be described as dealing with the ancestry of ornament.

THE superb cross at Stourhead, originally erected in the College Green of Bristol in 1373, has just been restored by Sir Henry Hoare, to whose ancestor it was presented after it had been ignominiously pulled down by the Bristol citizens. The cross is no less than fifty feet high, and its niches are filled with several royal figures. This work has been accomplished as a memorial of the late Sir Henry Hoare, over whose grave a coped slab of the finest Sicilian marble has now been placed. The restoration of this unique mediæval monument occupied a large band of skilled statuary continuously during more than six months.

THE great ordnance survey map of England will be shortly issued. It has taken just 20 years to complete, and the total cost will, it is stated, exceed £4,000,000. The map will consist of some 180,000 odd sheets. In these the scales vary from ten to five feet to the mile for the towns, and from twenty-five inches to one-tenth of an inch for the country. In the former the details are so minute that not only the exact shape of every building, but every porch, lamp-post and fire-plug are shown, whilst in the 25-inch map for the country every hedge, fence, ditch or well is recorded.

It will not be long before the extension of the Record Office in Chancery Lane is ready for its precious charge of State documents and national archives, for the scaffolding which for so long has surrounded it is rapidly being taken down, and only the ground-floor is still hidden from public view. The narrow thoroughfare affords but scant opportunity of obtaining a full view of the fine façade; but, standing at the extreme end of the Incorporated Law Society's buildings, the spectator will have a good opportunity to survey the massive architecture of the new building opposite. The edifice is composed almost throughout of Portland stone, which, in addition to being picturesque, has the solidity which is demanded by a structure of such importance. The towers at each end form a relief to the frontage,

while in the centre, over the main entrance, there is some artistic moulding, and on the highest point there is a striking balustrade, surmounted by the Royal Arms.

THE usual animation in Art quarters was manifest on "Show Sunday," which, despite all that has been said in its disparagement, continues one of the most popular of the art functions of the year. Crowded studios were the rule, and fashionable visitors scanned in the customary superficial fashion the works on the easels. To what extent the artist is benefited by this sort of patronage it would be difficult to discover. It is doubtful whether a picture was ever sold through the medium of a "Show Sunday" view, and certainly a reputation was never made through its agency. Artists are, however, presumably at least, the best judges of their own interests, and if it pleases them to surround themselves once in the year with a crowd of well-dressed nonentities, it is not for others to say them nay.

A BEAUTIFUL and interesting bas-relief in terra-cotta, of the Virgin and Child, which by competent experts is attributed to Andrea del Verrocchio, who, according to Vasari, "was a goldsmith, sculptor, carver, painter, and musician," has been acquired by the Birmingham Art Gallery. This work is an excellent example of his skill, and will form a pleasing pendant to the Della Robbia bas-relief of a similar subject in the Italian Gallery. The Committee has also purchased the fine reproductions by the Berlin Photographic Company of the celebrated "Meyer Madonna," by Holbein, at Darmstadt, and the collection of reproductions of Rembrandt's pictures in the famous gallery at Cassel. The collection at Cassel was formed by the Elector, who, when nobody cared for art, in 1730 to 1750, went systematically to work in Holland collecting Dutch pictures. He gathered together no less than forty Rembrandts of the highest importance. Some of the finest were carried off by the French at the end of the century, and never went back; but some twenty-eight are left, and of these the best seventeen have now been carefully reproduced in photogravure.

A SHAFT in the earth is to be the chief attraction at the next Paris Exhibition, some particulars of which we gave in our last number. Mr. Paschal Grousset, whose the idea is, says that the descent will at once fascinate the public and enable scientists to see how hot it gets as they go down. He does not propose to risk too much for the satisfaction of the latter. The diggers will desist at a depth of 4,500 feet, where the heat, it is thought, will be at least tropical; and at this point borers will take up the investigation, in the hope of finding "a new source of light, heat and power." At various stages of the descent there will be galleries decorated to match the climates, and furnished with suitable refreshments. This romantic idea will pique the curiosity and revive the good humour of all Paris, but it will cost, even on M. Grousset's reckoning, half-a-million sterling, which is two and a half times the estimate for the Eiffel Tower.

It has been repeatedly demonstrated that Whitechapel, than which there is no more maligned district of London, includes among its inhabitants a large number who are appreciative of art. Canon Barnett had, therefore, ground for the hope he expressed, on the occasion of the opening by Mr. A. J. Mundella, M.P., of the annual Exhibition of Fine Art in St. Jude's Schools, that a donor would be found ere long to build a museum, in which such rare paintings as are here found can be displayed to the best advantage. About £20,000 would be required for that

purpose, and the institution, at which two exhibitions might be held yearly, could be maintained under the Libraries and Museums Act by the local authority.

SIR JOHN TENNIEL'S exhibition of pencil and pen and ink drawings at the Fine Art Society's Galleries is drawing a "crowd." They are the originals of work that has appeared from time to time in *Punch*, but the collection by no means covers all Sir John's contributions to that periodical. Too many were executed on the block itself, and so have perished, you may say, in multiplying copies of themselves. Sir John Tenniel is a born illustrator, one who gets a grip of the humour or pathos of a subject and never lets go. He troubles less about general effect than about the clearness of every necessary or explanatory detail in his subject. It is his setting of the scene, his choice of *mise-en-scène* in fact, that gives virtue to his pictures, rather than the quality of his line as decoration or the sureness of his eye in realising character and the structure of forms. One seldom feels excited or exalted by his dry, uniform technique, but one is always amused or touched, as the case may be, by the aptness of his adaptation of an incident to humorous or pathetic ends.

THERE would seem to be an aristocracy in Labour already, and "Movement" now means so many different things. Mr. John Burns ought to know something about "Movement," and it is remarkable, therefore, that he should admit one of the gravest objections that persons who are not "democrats" make to the "Labour member." Speaking at Battersea he said there was a tendency to regard a "working-man member" simply as a person who went to the House of Commons to do jobs for the people who sent him: "These people seem to regard their member as a mere instrument for bringing work into the district, and the House of Commons as a great log-rolling centre for industrial purposes. On that platform was a man, Mr. Will Crooks, whose life had been threatened by an angry mob in the East-end because he had refused to consent to grant indiscriminate outdoor relief as a Poor Law guardian. If this tendency were allowed to continue," said Mr. Burns, "Parliament would become as pernicious and corrupt as that of America." Then America is not exactly the Home of the Free? As "pernicious and corrupt as" the leading Republic of the World is certainly an "Honest John" admission!

THE papers to be read at the first four Wednesday meetings of the Society of Arts after Easter are as follows: "The Use of Electricity for Cooking and Heating," by Mr. R. E. Crompton; "Deviations of the Compass," by Professor A. W. Reinold; "The Extraction of the Rarer Metals from their Oxides," by Professor William Chandler Roberts-Austen, C.B.; and "Means for Miti-

gating the Fading of Pigments," by Captain W. de W. Abney, C.B.

THE Hospital Committee of the Urban District Council of Ilkley recommended, on Thursday, that the whole of the designs (submitted in response to a public invitation by the Council) be discarded, in consequence of the competitors having failed to submit plans sufficiently satisfactory without necessitating considerable alteration and additional outlay; also that plans be prepared for a hospital to accommodate sixteen patients, and that such buildings as can be completed by an expenditure of £3,000 be proceeded with after obtaining the sanction of the Local Government Board. This recommendation was adopted, and the Committee empowered to consult any of the original competitors as to the preparation of plans and terms.

A HANDSOME annexe to King's Cross, the Great Northern Railway terminus in London, has been built, to be called the "local station," and was opened for traffic on Thursday. In addition to three lines of rails, room



SALFORD SCHOOL BOARD OFFICES.

WOODHOUSE & WILLOUGHBY, ARCHITECTS.

has been found for two ample platforms—one of them an "island" platform—with the dimensions and general appearance of which it would be difficult even for a rival company to find fault. Each platform is 500 ft. long by 20 ft. wide, and the two, together with the three lines they serve, are covered with a roof constructed of Mellow's patent glazing in "ridge and furrow" spans, and presenting an exceedingly bright and handsome appearance. One of the new platforms communicates direct with the main station, but the general entrance for the public is practically the same as that to the suburban station, only that, in view of the increased traffic, the doorways have been enlarged, and new waiting rooms and additional circulating area provided. Moreover, a glazed roof of similar construction to that which covers the new station itself has been thrown over the cab road, thus providing a new covered area of over 12,000 feet for the shelter of passengers alighting from cab or carriage at the new station entrance. The new local station, like the rest of the King's Cross terminus, will be lighted by electricity.

MR. LIONEL CUST has been appointed Director of the National Portrait Gallery. He is a descendant of the first Earl Brownlow, and has been a member of the Civil Service since 1886—first in the War Office, and subsequently in the Department of Prints and Drawings at the British Museum.

AFTER all, and contradictions to the contrary, the Palais de l'Industrie in Paris is to disappear to make way for the approach to the future bridge connecting the Esplanade des Invalides Girdle Railway terminus with the Cours la Reine. The Palais de l'Industrie was built at a cost of nearly a million sterling to serve for the Universal Exhibition of 1855. It is an ugly, but most useful building, owing to the great space that could be devoted in it to paintings and sculptures. It opened a new era in French art. The keenness of the competition among artists to which it gave rise forced new schools into existence. It also fostered a mercantile spirit and a keen eye to existing and possible markets. A number of people have bestirred themselves to save the building. The only satisfaction they have met with is a promise that it will only be demolished piecemeal, and that three more art exhibitions can be held there.

FROM Scotland we hear of a species of telegraphic communication which, though not new to the scientific world, may fairly be described as marvellous. The cable between Oban and the Isle of Mull being out of order, messages have been transmitted across the water without any connecting apparatus whatever. This astounding result has been achieved by means of the well-known telegraphic phenomenon called induction. A wire is erected on the mainland opposite to and parallel with a portion of the telegraph line on the island. The message which it is desired

to communicate to Mull is transmitted over the wire on the mainland in the ordinary way. The signals thus transmitted pass at the same time over the parallel line in the Isle of Mull, and telegraphic operators there read them by means of a telephone. This fairy-like achievement of science is not by any means novel as an experiment, but we believe it is the first time it has been turned to account in the practical, everyday work of telegraphy.

EVEN a railway company occasionally deserves a good word. The London and South Western coped in a business-like way with the troublesome disaster at Guildford. The extemporised road service between Guildford Station and the Godalming mouth of the tunnel improved day by day. Covered sheds were erected at the temporary station by the tunnel, and hand-carts and waggons for the transport of luggage were freely supplied, and inconvenience and loss of time were reduced to a minimum. On the up journey, however, it was impossible to avoid some dislocation of trains. By the beginning

of last week trains were again running through the tunnel. The first train ran through from Guildford to Godalming, passing slowly through an army of workmen, and under a framework of timber, the commencement, apparently, of the arch of the tunnel.

THE Department of Science and Art has received, through the Foreign Office, a copy of a note from Her Majesty's Consul at the Piræus, relating to a permanent industrial exhibition which has been organised by the "Société Biotechnique" at Athens, to be officially opened on April 28. This exhibition, although intended only for native products, will be accessible to foreign exhibitors of such articles as may assist in the development of Grecian industries. All expenses connected with the exhibits will have to be paid by the exhibitors, who will, moreover, have to pay a tax of two drachmæ for each article worth 100 drachmæ. Articles worth more will be charged half a drachmæ per 100 in addition. The committee of the exhibition undertakes to sell the exhibits at a commission of 5 per cent. The exhibition will be open each year from March 13 (March 1 O.S.) to July 12 (June 30 O.S.), and from Sept. 27 (Sept. 15 O.S.) to Jan. 27 (Jan. 15 O.S.).

SHEFFIELD proposes to build a Physical College, somewhat on the Y.M.C.A. plan, but unconnected with religion or politics. The building will be of brick, with stone facings, and the ground floor will be divided into six shops. The entrance will be in Charles Street; at the top of 16 steps the inquiry office, telephone room, and a cycle stable capable of accommodating 100 machines. On the floor above there will be a gymnasium, 94 feet by 64 feet, the floor of which could be used as a full sized tennis court, and 12 feet from the floor a running track, which could be utilised as a balcony on the occasion of displays. Such a gymnasium will be second only to Liverpool, which is the finest in the kingdom. The cost of the land will be £6,474, the building £5,800, and the solicitors' and architects' fees, apparatus, and furnishing £1,500, making a total of £13,774, or £14,000 in round figures. Mr. H. W. Lockwood is to be the architect.

THERE is something characteristically French about the story of Marseilles and its monument, for the port has just erected a statue to the dead who yet live, and to the fallen who never fell. The town council resolved some time ago to set up a statue to the Gardes-Mobiles and the Francs-Tireurs of the Department Bouches du Rhône who fell in 1870, and a fine allegorical group soon rose in the Allée du Meilhan, representing France leading her sons to the battle. The Marseillais were delighted with the noble monument, but one detail failed, namely, the names of the fallen heroes to be engraved in gold on the pediment. Many, too many, had doubtless fallen, but their names were forgotten, and not a single son of Marseilles belonging distinctly to these regiments could be recorded. Yet the municipal council showed themselves equal to the emergency, and offered themselves as conscripts or candidates for "fallen" honours. "You want names," they said: "we give you our own." And so it has been done, for under the noble group of France and her sons going to the slaughter come the names of the victims, who are just the municipal councillors of Marseilles to-day!

THE "Izaak Walton Memorial Window," which has been placed in the church of St. Dunstan-in-the-West, Fleet Street, was unveiled on Friday by the Master of the Ironmongers' Company, of which Walton was a

member nearly three centuries ago. A marble tablet, giving some particulars about the famous angler, is also to be fixed on the outside wall of the church.

"THE economical lighting of public and private buildings, workshops," was the title of a paper read by Mr. John West, ex-president of the Gas Institute, at the meeting of the Manchester Association of Engineers. The Welsbach incandescent gas burner, regenerator burners, argand and other burners were shown in operation, and remarkable illustrations were given of what is possible in the way of securing a brilliant gas light at a minimum cost. Mr. West in his paper explained that the gas supplied throughout the United Kingdom varied in illuminating power from 12 to 28 candles. In many English provincial towns it ranged from 12 to 15 candles; in London it was 16½ candles; in Manchester and other places near the canal fields it ranged from 15 to 20 candles; and in Scotland it ranged as high as 28 candles. But in far too many cases the consumer did not get full advantage of the lighting power of the gas. About thirteen years ago he obtained a large number of the burners in ordinary use in Manchester, and found that the loss of illuminating power by their use came in most cases to over 30 per cent. He feared, from observations he had since made, that the loss was still going on. The best kinds of the ordinary burners were to be had cheap, and in order that there might not be undue pressure of the gas as it issued from the burner, resulting in imperfect combustion and consequent waste of light, he recommended that in private houses a regulator should be attached to each burner, or that what are known as governor burners should be used.

For lighting public and private buildings and workshops, he strongly recommended the incandescent gas burner, which he was using at his own works, with the result that he obtained at half the former cost four times more light. Alike in public and private buildings where general lighting was desired, he recommended that the chandelier or pendant should be placed in the centre of the building or room, as where brackets were used the walls absorbed a great quantity of the light. Comparing the cost of incandescent electric lighting with the cost of incandescent gas lighting, he stated that a 16-candle incandescent electric lamp in use 1,000 hours would absorb 60 units of electricity, which, at 6d. per Board of Trade unit, would come to 30s., whereas an incandescent gas burner consuming three cubic feet of gas per hour or 3,000 cubic feet in 1,000 hours, and giving a light equal to that of 60 candles or fully three times that of the electric light, would cost, with gas at Manchester at 2s. 3d. per 1,000 cubic feet, 6s. 9d.; at Maidstone, with gas at 2s. 4d. per 1,000, 7s.; and at Plymouth, with gas at 1s. 9d. per 1,000, 5s. 3d. He challenged the electricians to disprove these figures. This is a bold attitude. Electricians would do well to accept the challenge and prove, once for all, whether the electric light can or can not be made a commercial competitor of gas.

HOUSES Wanted! The demand is refreshing and it happens to be genuine, for, at the monthly meeting of the Burley-in-Wharfedale Urban District Council, a letter was read from Messrs. W. Fison & Co., of Greenholme Mills, in which they stated that they agreed with the medical officer of health as to the urgent need of more house accommodation in the village. The firm themselves were not disposed to meet the demand by erecting houses, but they should be willing to place

suitable land at the disposal of builders at a reasonable rate, and upon easy terms. We hope all builders will not speak at once.

WE think the inquiry of General de Courcy Scott into the complaints made against the Water Companies during the frost ought to result in something, but we are not hopeful. All "inquiries" seem to us to halt before they begin. But the Local Government Board has at last a chance of doing some really useful work for the community, and we hope it will use it. It is absurd to speak as the *Times* does of the recent frost being so very "exceptional." It was exceptionally long, and perhaps exceptionally severe; but the state of our water-pipes was not exceptional at all. Whenever there is anything of a frost, the water-supply in certain wide areas of London fails, just as it did this year. Now that "exceptional" hardship has compelled attention to what is a normal state of things, there may be a chance at last of providing that in future such things shall not occur more or less regularly every two years or so. The aroused attitude of the Local Government Board will not, we trust, prove a bit of a "frost." We have had "frost" enough.

NUDES and dreams will be in the ascendant, we are told, at the forthcoming Art shows. They are cold subjects for Spring, but a cursory look in at the outsiders' studios revealed the fact that nine-tenths of the pictures were designed for the gallery, not the dwelling-room; completeness of execution was the exception, and works costing less than three figures were altogether absent. Subject there was in plentiful variety, but more often than not of a distressing character. It would be appropriate to describe the show this year as the Academy of "Life and Death," more especially the latter. Sir John Millais's "Death of Stephen," Mr. John Collier's "Death of Albino," Mr. Gotch's "Death, the Bride," Mr. Dicksee's vision of a dead wife, and Mr. Lockhart Bogle's "Highland Funeral" are but a few instances which occur. Life in its plentitude of beauty will be typified by a display of nudities which English artists a decade ago would not have dared to put on canvas. Mr. Poynter will show a large picture in which there will be several; Mr. Normand has an equally important work, the title of which, "Bondage," almost explains the subject of the purchase by an Eastern potentate of occupants for his harem; Mr. Oliver has a nude of Juno and her Peacocks, and Mr. Walter Bayes a nude in the open.

AN early occupation of the new Sheffield Town Hall is hardly likely to be realised. Industrial disturbances—if one may so term the plasterers' strike—and the long spell of keen and nipping frost have done much to delay the work. The contractor, Mr. Edmund Gabbutt, has over 200 men at work. In the vestibule of the main entrance men are engaged on the six large ideal figures which the sculptor, Mr. Pomeroy, has moulded. They are reproducing the outlines in the rough for the sculptor and his assistants to finish with their more skilful hands. The chief of the outside adornments will naturally be the statue of Her Majesty, by Raggi, which, now that the screen of canvas has been removed, is visible in the niche high over the main entrance in Pinstone street. The giants' pediment of Thor and Vulcan, in heroic size, supporting the coat of arms will be, however, the most striking piece of sculpture. These have not yet been hoisted into position.

ACCUSTOMED to her Majesty's habit of employing German painters to execute Royal portraits, there is a certain sense of refresh-

ment in the knowledge that she has commissioned Mr. A. C. Cope to proceed to Berlin to paint for her a likeness of her grandson—the Emperor of Germany. Mr. Cope will be remembered as the artist whose portraits of Mr. Fowler, Mr. Mundella, and others in last year's Royal Academy, attracted much attention.

THE new Chairman of the County Council, Mr. Arthur Arnold, presided over the opening of the gardens known as Telegraph Hill at Hatcham, near New Cross, on Saturday afternoon. The idea of this important addition to London recreation grounds originated with Mr. George Livesey, who contributed to the fund £2,000. The Haberdashers' Company, from whom the property was purchased for £8,000, subscribed a like sum, as did the Greenwich District Board of Works, the remainder being voted by the London County Council. The two gardens cover altogether about ten acres. In commemoration of the event, and for the information of visitors, the Council has issued a little pamphlet, with a ground plan, giving a history and description of the property. The hill derives its name from the fact that it was one of the stations of the old semaphores, or signal posts, by which, long before the invention of the electric telegraph, Government messages were, in clear weather, transmitted to various parts of the kingdom with considerable rapidity. Telegraph Hill formed part of the succession of such semaphores, established just one hundred years ago, which placed the Admiralty at Whitehall in communication with Deal and Dover. The site, as will be inferred, is a somewhat lofty one. The upper and smaller garden on the summit of the hill stands at 160 feet above the level of the sea. Up to only a few years ago, Telegraph Hill stood in the midst of fields. London, however, has gradually crept up to and surrounded it; but it still commands fine views, especially to the southward. The conspicuous clump of trees near Sevenoaks, known as "Knockholt Beeches," can be seen from its summit.

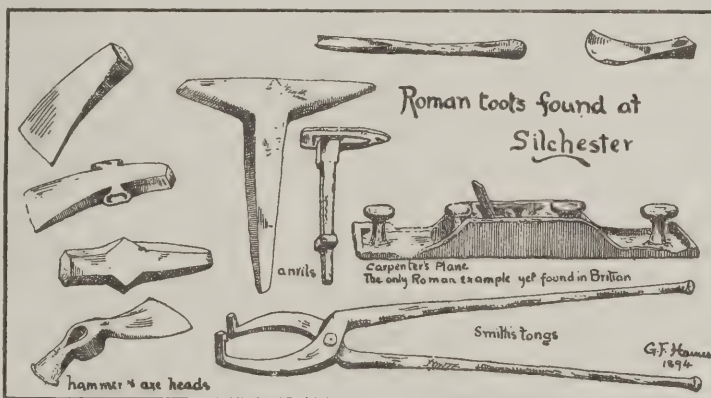
THE New York Niagara Power Company is starting on the enterprise of a "model city" in the neighbourhood of the Falls. It is to be the most perfect city in existence, lighted and heated entirely by electricity, and therefore wholly free from smoke and fog; 30,000 families are to have homes of their own; five square miles, with 60,000 horsepower, are to be given to the manufacturers, and there is to be no liquor saloon in the place.

THERE is a Fifeshire legend to the effect that when Donibristle House has been thrice burned the Earldom of Moray will become extinct. The house was in 1858 destroyed by fire for the third time, and since then it has remained in ruins. Roofless and mouldering the weather-beaten ruins overlook the waters of the Forth and the Island of Inchcolm. The chapel, in which the late Earl was interred, and in which now lie the remains of seventeen members of the Moray family, is a quaint, unostentatious little building, situated about four hundred yards from Donibristle House, and is reached by a narrow pathway winding between ancient trees about whose gnarled trunks the ivy clings.

DR. LONGSTAFF is again Chairman of the Building Act Committee of the London County Council, and, in addition to the

appointments already announced, committee chairmanships have fallen to Mr. Bruce (Public Health and Housing), Mr. Thornton (Stores), Mr. Charles Harrison (Local Government and Taxation), Colonel Rotton (Industrial and Reformatory Schools), Mr. Fletcher (Parks and Open Spaces), and Dr. Collins (Public Control).

MR. B. PRIESTLY SHIRES, A.R.I.B.A., of Plymouth, following up his description of English architecture, took Adel Church, Yorks, as illustrating a typical Norman church, built A.D. 1130. Shortly before, the neighbouring Abbey of Kirkstall was commenced, and had stood from that time to the present day with very little alteration. Mr. Shires illustrated upon the black-board its many features from his actual survey of the church published several years ago. The plan was a very simple one, consisting only of nave and chancel, with a small modern vestry on the north side of the chancel and a beautiful Norman porch on the south side. Dividing the nave from the chancel was a highly enriched chancel arch with a great amount of carving in basso relievo. The ancient Norman roof over the chancel was one of the very few specimens of an early manner of roofing. For an Early English example, Mr. Shires commenced with Skelton Church, a purely typical church



of the period, the detail exceptionally rich, and the whole of the work of a very high order.

MISS JANE E. HARRISON, the well-known writer and lecturer on Greek art, who has received from the University of Aberdeen the honorary degree of LL.D., is the first woman to be honoured in this way. All the other women LL.D.s obtained the distinction after examination. Miss Harrison is also, it is probable, the woman to whom the honour is most appropriate. Her knowledge of Greek art is unrivalled.

A SINGULAR error which has appeared for a long period in all the best-known descriptions of London has been recently discovered. Mr. Fincham, the architect who has supervised the restoration of the crypt of the ancient Church of St. John, Clerkenwell, and Mr. Welch, the Guildhall Librarian, have found that the sketch of St. John's Priory, Colchester, has done duty for many a year in the guide-books for St. John's Priory, Clerkenwell. The St. Paul's Ecclesiological Society, having paid the crypt a visit, commenced searching for old prints of the Clerkenwell district at Guildhall, and in this way the old-time error was discovered.

LEEDS is going in thoroughly for the abolition of its insanitary areas. We are glad to learn that the Sanitary Committee has been authorised by the City Council to prepare a large scheme for dealing, under the Housing of the Working Classes Act,

with the property situated between North Street and the Parish Church. Alderman Ward, Chairman of the Committee, said at a recent Council meeting, that the area was about 77 acres, and the cost would be something between £300,000 and £400,000, but the land could be disposed of afterwards. From this, the scheme would seem to be provident as well as necessary.

THERE will shortly be sold, under the hammer, the large Devon property of Flete, an estate covering 5,600 acres, and having a rent roll of £9,000 per annum. The mansion itself is by R. Norman Shaw, R.A., the interior treatment of the house being very fine, notably the billiard room, hall, library and music room, the latter having a lofty barrel-vaulted, ribbed roof, with a fine organ at one end.

"TARA'S HALLS" are to be disturbed, a proposal having been made to explore the Hill of Tara. To many persons the name of Tara is best known in connection with Thomas Moore's spirited and tuneful verses. Antiquaries may be expected to know a little more about it, but even in their case much is the result of conjecture. Tara is only a little over twenty miles from Dublin. It is one of two hills which relieve the monotony of the level plain from which they rise. Curiously enough the Hill of Tara has never been properly examined, in spite of its great historical importance. The present proposal for its excavation is that the works shall be directed by experts under the supervision of the British Archaeological Association. Tara is covered with remains of a very early date, but it is on the southern side that the principal of these exist. A fence of stone runs across from the old churchyard and divides the Russell and Preston properties. On the southern side of this wall are the principal earthworks—namely, the Rath-na-Riogh or Cathair Corofin. The Rath-na-Riogh is a large outer earthwork encircling two raths or ancient Irish forts, the lines of which intersect. The western rath is the older of the two, and the centre of it is a raised mound, on which rests the Lia Eail still in Tara, which now covers the "Croppies' Grave." This has been removed from the crowning mould to the north-west, where it originally stood. This central mound, on which is the "Croppies' Grave," is about twelve feet above the surrounding fosse, and this is it that many persons are disposed to assign as the most probable site for Tea Tephi's tomb. Mr. George Payne, F.S.A., is to be invited to superintend the work of excavation.

WHEN Greek meets Greek! Mr. J. L. Macadam, the Scotchman who invented the road which bears his name, is said to have been a guest at a large dinner given in honour to Sir Walter Scott. Being asked to respond to a toast, Mr. Macadam rose, and, at the end of his speech, proposed the health of "the great Sir Walter Scott, the Colossus of literature!" In a instant Sir Walter was on his feet, and lifting his glass, exclaimed: "Here's to the great Mr. Macadam, the Colossus of roads!"

THE United Kingdom section of the Imperial Institute is to be augmented during the approaching summer season by an exhibition of railway appliances and inventions. The International Railway Congress, which is to be opened by the Prince of Wales in June, has supplied an appropriate opportunity for displaying the capabilities of

important branches of British industry connected with the railway services of the country, and the Executive Council of the Institute have undertaken the necessary arrangements. The exhibition will be located in special buildings in the south-east quadrangle of the Institute, and several of the leading manufacturers of the United Kingdom will be represented. Many of the exhibits will be shown in motion.

AMONG the many interesting Roman "finds" of recent years were the Roman tools discovered at Silchester. They exhibit great similarity to the implements of the present day, reminding one once again that there is nothing new under the sun. The iron plane in particular bears great resemblance to the American ones now in use, while the anvils and other tools are equally like those now used. When they were on view a facetious spectator suggested that they had been made at Sheffield and buried (for the purpose of discovery) on the site of the old Roman city.

MAXIM, the gun man, first established works in Hatton Garden, Holborn, England, early in 1884. By his indomitable application and persistent study he perfected his idea, so that during a machine-gun competition at Hythe he beat all competitors, his gun having a total weight of but forty pounds, firing 1,000 rounds in one and a quarter minutes. After this he exhibited his destructive weapon in various parts of Europe. The Maxim gun was thereafter speedily recognised to be the most deadly instrument of warfare in existence. The guns were first fired in actual warfare by Sir Francis de Winton during the Sierra Leone campaign, and were also employed by the great African explorer, H. M. Stanley, in his last famous travels.

"MEN WHO BUILD: MR. JAMES BROOKS."—By an easily explained error we attributed "The Entrance to Humewood, Co. Wicklow," an illustration of which appeared in our last number, to Mr. James Brooks. The original architect of Humewood was Mr. William White, and Mr. Brooks was called in to complete the work. This, he did. The Entrance, however, Mr. Brooks desires us to state, was entirely by Mr. William White, F.S.A.

The Builders' Journal.

MEN WHO BUILD.

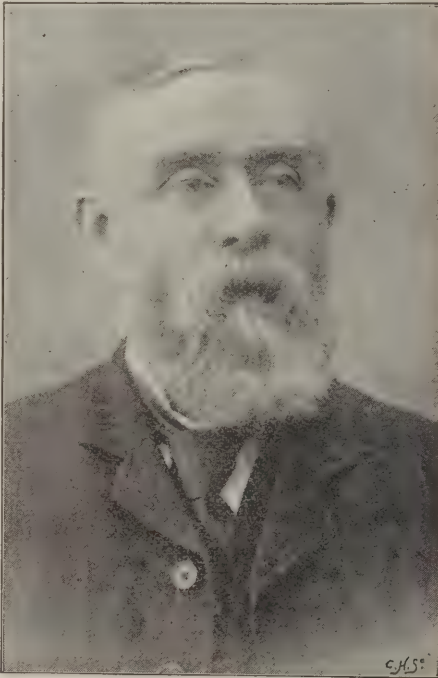
No. 9.

MR. T. J. BAILEY,

ARCHITECT TO THE LONDON SCHOOL BOARD.

AND Mr. Bodley imagined that his delicate little building on the Thames Embankment would form the key note of a huge pile contributed by no less than four architects, he would not have treated his elevation as he did. London does not possess a finer position for the administrative head-quarters of its School Board than where it stands, tucked away in close proximity to the delightful "blocks" in Arundel and Norfolk Streets, most of which are from the boards of Mr. John Dunn; close also to the secluded nooks and crannies of the Middle Temple, with its tiny fountain in Fountain Court still agitating the little gold fish "versed in the law;" and overlooking Fowler's statue in the little garden with the band stand, beyond which the lazy ripples of the dear old Thames laves the mud on the further shore, gently putting the barges to bed upon its bosom, or waking and taking them away before morning breaks. Wharves of hideous outline form the horizon; to the right, "if it wasn't for the bridges in between," one could get a glimpse of Big Ben and the fine contour of London's one neglected boulevard; and to the left, where once stood an honest printing house of fame and reputation, Waldorf Astor, the American, has come along, with John Pearson, R.A., and builded himself a mansion, faire to see, of stone and much carving, with his coat of arms above the entrance way, and much marble and alabaster and fine woods within. And lo! upon the weather vane appeareth a big ship, methink in copper covereth with gold; and the ship is a galleon of an old century, typical of the going of Columbus. And Waldorf Astor loves Columbus for he has reason so to do.

You are not impressed with the architecture of the London School Board headquarters, without or within. It is the home of education, not of art, and many of the Progressive division find pleasure in the thought that whilst they insist upon wide corridors and ample lighting in their schools, the magnanimity of their hearts allows them to discard both in their home on the Embankment. A dilapidated model of a Chinese or Japanese schoolhouse forms the feature of the hall, a silent reference to the warfare which goes on in the placid Council Chamber at the Temple end of the building. There



are sporting proclivities in the School Board, for the lift boy—of Progressive faculties also—begs you to tell him if the paper which you carry contains the latest cricket. It does, and the lift boy is happy.

Mr. Bailey's office is on the second floor, with a truly magnificent view over the river



LAVENDER HILL SCHOOLS: MR. T. J. BAILEY, ARCHITECT.

You tell him so, but he smiles and says he has no time to look at it. He lays up all his appreciation for natural scenery until the time he takes his yearly holiday, and for nearly 30 years he has trotted through Europe with his sketch book and measuring rods, sketching and measuring as he goes along. "The finest way, I tell you, of blowing out the dust of duty, and laying up a stock of vigour and energy against your next ramble," Thomas Bailey does not dangle with the fringe of art. Many years ago as a boy he entered the office of Mr. Withers, the Church Architect of Doughty Street, served his articles with him, travelled with him, sketched with him, left him to go to Ewan Christian for a couple of years, and then went back to Doughty Street, because his old master was miserable without him. Mr. Withers died, and Thomas Bailey, five and twenty years ago, came as an assistant to the

were only 21 or 22 feet wide, the desks occupying 12 to 13 feet from the back, and the space in front used as a passage, and full up with teachers' desks, blackboards, and general teaching paraphernalia. The staircases were narrow and ill-lighted, and fed the schoolroom with cold air in the winter which counteracted any warming power supplied in the room. The arrangement of cloak rooms and lavatories was extremely haphazard, but the requirements of the Education Department were very different from what they are at the present time, for even so recently as twelve years ago it published model plans for schools of varying sizes, which, if followed now and sent to it, would receive distinct condemnation. Mr. Bailey is good enough to go through these details with you and to point to the pitch of advancement the planning of schools has now reached. The want of access to class-

side-lighted, and having its separate access directly into the hall or corridor. The Education Department now require that there shall be a minimum of 30 square feet of open play ground for each child; the larger the school, the greater density of the population around it, and, consequently, the greater need for these open spaces. The comparison between the earlier and present schools would not be complete without a reference to the offices and latrines. The old system has long since been found to be insanitary, and the stoneware glaze trough and automatic flushing tank has altered matters greatly, although, even yet, perfection has not been attained in this direction. Experiments are still being made in order to get rid of the trough system altogether.

Of the architectural features of the schools themselves, Mr. Bailey has much to tell. Like the honest man that he is, he lays all



THE PLOUGH ROAD SCHOOLS, LAMBETH: MR. T. J. BAILEY, ARCHITECT.

London School Board, before it had attempted to build a single School under its own direction. In those early days the work was put out to competition, but as it increased it became necessary to centralise the administration, and now the drawing office houses twenty draughtsmen, and Mr. Bailey has the actual superintendence at this moment of work costing half a million of money. It is amazing to follow the advance of school planning since the Board first began work, and to listen to Mr. Bailey tracing its development. Twenty years ago the buildings were planned with a long central room, and one or two small class-rooms at each end. The central room, a schoolroom, crowded with children, was a passage to reach the class-rooms, and was arranged with desks along the back wall, the principal window being in this wall, behind the children, and full in the eyes of the teachers. These rooms

rooms developed the corridor, but, at first, these were built narrow, were used as cloak rooms and not warmed. These corridors, now in their turn condemned, were widened from 4 feet to 8 feet, then to 12 feet, then to 20 feet, and then by a process of evolution the hall became developed. As soon as the corridors were widened, separate cloak rooms were built. A system of warming, other than by open fires, was established and extended to the corridors and cloak rooms, and thus the discomfort of draughts from the staircases was obviated. As soon as the hall became recognised as a necessary part of the school, when the class room system was entirely adopted, the need for dividing up the main room to isolate the classes no longer existed, as the big teaching room ceased to exist, and the schools then consisted of the requisite number of independent class-rooms, each properly

the praise at the feet of Mr. Robson, whom he assisted for a very long time and whom he succeeded eleven years ago, when Mr. Robson resigned his position, to accept the position of consulting architect to the Board of Education. It may be quite true that Thomas Bailey has merely continued the lines laid down by Mr. Robson, but as he worked side by side with his old chief and has, since Mr. Robson's retirement, pressed his own "striking" individuality upon the work, it would not be fair to take from him much that is his due. During the eleven years Mr. Bailey has been at the head of affairs he has carried out work to the value of two millions and a half and every building has been planned by his own hands. At the moment he is constructing elementary schools, schools for children of feeble intellect, centres for the deaf, for cookery, for laundry work, and for manual training. There

are also in course of construction offices for divisional business and a large institution on the cottage system for the deaf at Anerley. The officials of the School Board, Mr. Bailey tells you, do not recognise dumbness; they teach the dumb to speak, and he says that the system is having some remarkable results. The children of weak intellect are most tenderly considered. Little schools of three or four class rooms are constructed in central positions, and the poor little children drawn from the general schools, and subjected to every care and consideration. In the area over which Mr. Bailey holds sway there are at the present time no less than 500 buildings, and so close is the chief architect's connection with his work that he has been actually connected with every single one; can centre—owing to a remarkable memory—the planning and details of each, and can at any moment answer any question appertaining to the construction of any one. At one time it was decided to put the planning of a certain school out to competition, and Mr. Macvicar Anderson was appointed assessor. When the award was made it was discovered that the successful competitor was an old assistant of Mr. Bailey's, and that the plan was identical in every single feature, almost in every single line, with an existing school built by him. That fact settled once and for all the question of competitions.

Perhaps the finest schools the Board has ever erected are the Hugh Myddelton Schools, which you are happy to be able to illustrate. This school stands upon an historic site, taking the place of a portion of the old House of Detention in Clerkenwell, and which was opened by the Prince of Wales. The area of the site is 95,832 square feet or upwards of two acres, and being surrounded by streets is well off for light and air. The school is built for 2,000 children in three departments.

There are also on a site a separate school of 12 classrooms, six on each side of a corridor 20 feet wide, for the instruction of the deaf, also a centre for cooking instruction, and a centre for laundry work. The main school, three stories in height, has a centre hall on each floor, 80 feet by 40 feet, classrooms being on either side. Eight superficial feet to each child is the "item" of calculating the accommodation. Needless to say, the questions of warming and ventilating were soundly considered, and already the Board has recognised the perfection of the school by determining that higher standards should be taught there, and that a chemical laboratory be at once erected.

In his domestic moments, Thomas Bailey lives at Norwood, but he has a little "hut" near Fleet Pond, in Hampshire, that he visits when the evenings are long, and the smell of the pines have more power than the beautiful view from his rooms on the Embankment. He has more legitimate architectural work passing through his hands than perhaps any other man in London,

and he rivals his old chief and colleague, Mr. Robson, in being an authority on school planning in England. He has a heart beyond Board Schools, however, and in his leisure moments can dilate upon the work of Norman Shaw and John Pearson, that can come only from a man with the faculty of good work, and an appreciation of the highest and most beautiful.

SUGGESTED ECONOMIES IN THE MANUFACTURE OF IRON.

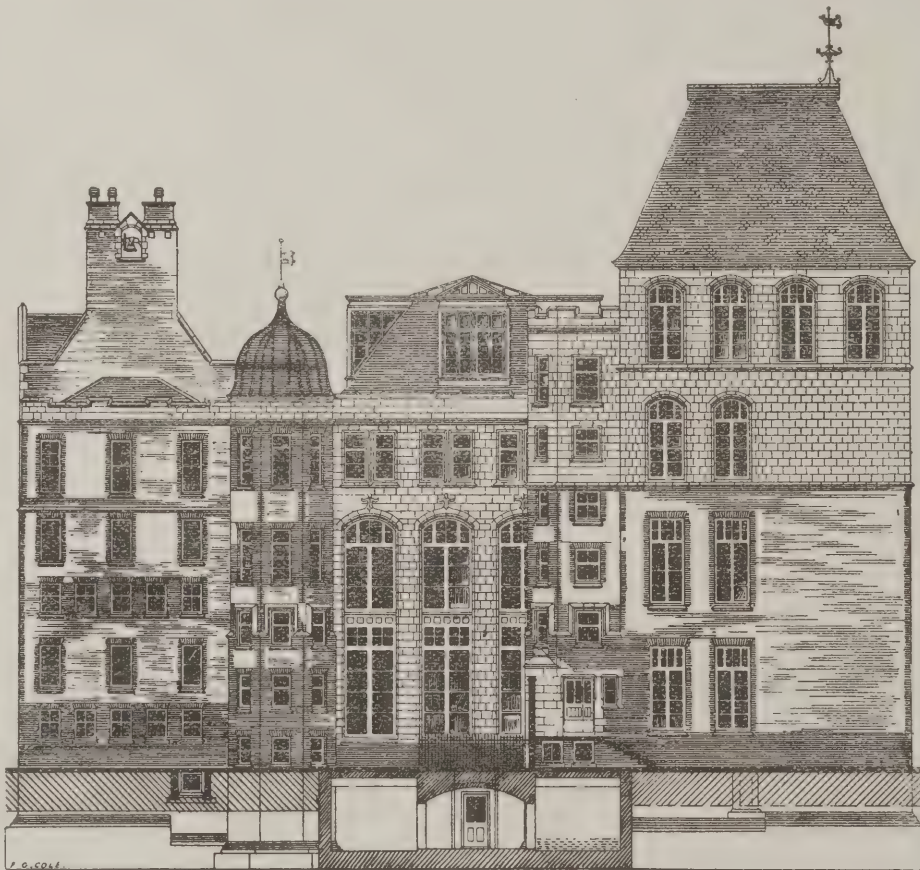
MR. ERNEST W. HARVEY, F.C.S., Associate of the Royal School of Mines, gave an address at Dudley, before the South Staffordshire Institute of Iron and Steel Works' Managers, relative to some suggested economies and improvements in the manufacture of bar, hoop, and sheet iron, having special reference to the fuel used and to the furnaces employed. He was of an opinion that for at least many

ever, that manufacturers should study in detail where economies—however small they might be in some instances—might be effected, so as to enable them to cope with increased competition. The most striking losses, from a fuel point of view, in the ordinary direct fire furnaces, so largely in use in ironworks of this country, were—(1) loss of fuel by maintaining the walls of the fireplace, in which no effective work was done, practically at the same temperature as the heating-chamber; (2) loss of fuel by maintaining the walls of the neck or flue, in which no work was done, practically at the same temperature as the heating-chamber, and by radiation and convection of heat from the surface of its thin walls; (3) loss of heat in the waste gases or chimney flue, due to inefficient boilers attached to such furnaces; and (4) loss of fuel by imperfect combustion of the coal-gases. He had had experience in the practical working of the new form Siemens furnace (introduced

by Mr. Frederick Siemens, of Westminster), both in the industrial districts of this country and in many of those on the Continent. That experience had convinced him that it was quite possible to obviate, or partially obviate, the defects or losses in the old furnaces, and to realise a considerable saving in fuel as well as in the puddling of iron in its subsequent reheating to welding in the mills, in heating iron in the form of scrap for making so-called scrap-bars, and in annealing iron and steel. The chief advantages of the new form Siemens furnace over the old ones were—(1) the sensible heat of the gaseous fuel issuing from the separate gas producers, and the heat formerly radiated from the incandescent fuel therein, was better utilised by making the gas-producer form part of the furnace structure itself; (2) the heat-giving power of the tar and soot formerly deposited in the cooling tubes or long

flues was now applied directly in the heating chamber; (3) the loss of gas at each reversal of the flame currents was avoided, also loss by escape of gas direct to the chimney through imperfectly fitting valves; (4) the saving in fuel by returning a portion of the hot products of combustion to the fuel in the gas producer, whereby the C O₂ contained in them was converted into C O. It was only reasonable to suppose that any apparatus which possessed the means of regulating the loss in metal or fuel would ultimately prevail, and displace one having no such means of regulation, or of which the good or bad results were due to chance. English ironmasters could effect real economies if they would improve and modernise their plant or apparatus, as had already been done by so many ironmasters in competing countries.

The ashes of coal from certain mines in South Africa have been analysed recently, and found to contain over nine pennyweights of gold to the ton.



HUGH MYDDELTON SCHOOLS, CLERKENWELL: MR. T. J. BAILEY, ARCHITECT.

years to come iron, although described as old-fashioned, would be in request for certain specific purposes, amongst others in cases where welds had to be made, such as bar-iron for smiths, chains, forgings, steam-hammer piston-rods (where percussion was constantly taking place), and soft iron for dynamos and other apparatus used in the electrical industry. On the other hand, it was certain that steel had displaced iron definitely and permanently for many purposes; although new uses had been found for iron of recent years, it was probable that the quantity required for such new uses was less than that already displaced by steel. The result was that the ironworks of this country, Belgium, France, and Germany were not so busily employed as formerly, and, consequently, competition among masters to secure orders for iron had proportionately increased both here and abroad, bringing the price of their produce so low as to leave only a very small margin of profit, and, it was feared, in many cases no profit at all. It was, therefore, now more necessary than

ARTISANS AT WORK.

COMPETITIVE HANDICRAFTS AT THE
BUILDING EXHIBITION.

A SERIES of interesting competitions in various handicrafts was a feature at the Building Trades' Exhibition which closed on Thursday night. The competitions took place the prior Saturday, and medals in silver and bronze were offered as inducements to highest effort, and the active movements of competitors working beside each other on similar tasks produced among spectators a mild form of the excitement that is aroused by a sporting contest. Moreover, there was interest in seeing how rapidly rough materials could be wrought into familiar shapes by the hands of cunning craftsmen. For carpenters, joiners, plumbers, and bricklayers, the tasks set did not permit any play of fancy. One group was engaged on the framing of roof timbers, in

work would cease. More leisurely, but still marked by surprising dexterity and directness of method, was the work of modellers, who from their own designs decorated spaces of given form with arabesques of figure subjects wrought in clay. The prevailing thought was over elaboration of detail, but two or three competitors adopted an artistic breadth of treatment, and modelled the flowing curves of leaves and flowers, the bold lines of grotesque heads, or the delicate features of a woman's face with skill and evident knowledge of the effects to be produced by simple means. There was art also in the work of stonemasons, who, following each his own design, cut arch stones from the rough blocks, reduced these to a variety of forms by mouldings that necessitated much dexterity, and relieved the contours by carving conventional ornaments on them. Plasterers moulded elaborate friezes; tile fixers laid sections of tessellated pavements from drawings which

and S. Evans, certificate. Masonry—Francis Montague, bronze medal; and John Hawley, certificate. Modelling in Clay—C. Giddings, silver medal; A. H. Borrowdale, bronze medal; and Robert Bussey and P. J. W. White, certificates. Painting and Decoration—S. Moore, bronze medal. Plastering—Alfred Brown, bronze medal; and W. T. Drew, certificate. Plumbing—G. Crabbe, silver medal; C. W. Walter, bronze medal; and W. J. G. Fraquair and W. Webb, certificates. Tile Fixing—Henry Lambert, bronze medal.

OUR Paris correspondent writes: The château of the Marquis de Solages at Carmaux was burned down last week. It was insured for £40,000, but quantities of rare pictures, furniture, and of old and interesting family papers have been destroyed. The Marquis is one of the directors of the Carmaux Collieries, of which he and his father-in-law, Baron Reille, are the principal proprietors.



SOUTH ELEVATION OF HUGH MYDDELTON SCHOOLS: MR. T. J. BAILEY, ARCHITECT.

accordance with dimensions given. Another had to prepare portions of window-sashes and frame together the joints of a four-panelled door. The bricklayers had to build twelve courses of a wall with angles, and window reveals true to plan, and the plumbers were all busy on junction pipes and the soldering of taps. Each competitor had, however, to set out on paper the methods which seemed best to him for executing his work in hand, so that mere skill did not count in the absence of any knowledge of constructive principles. Thus, the competitions had an educational value as means whereby every man could gauge the progress he had made by study at home or in a technical school. For each group of competitive work, the time allowed was eight hours, but one carpenter at least had finished his framing of king-post and tie-beam so quickly that he was able to enter the joinery competition, with a fair chance of getting through that also before ten at night, when

they had prepared previously; painters decorated panels by graining or fanciful designs, and smiths had an opportunity of showing how iron may be wrought into beautiful forms by the use of hammer and chisel. The judges were Messrs. A. Baker, H. Dawson, G. Pearson, H. D. Searles Wood, J. F. Clarke, G. A. P. Cuxson, B. J. Dicksee, W. Gullin, W. C. Street, Max Clarke, H. Leonard, Douglas Matthews, B. Tabberer, L. Solomon, C. T. Aston, J. W. Valentine, T. Blashill, H. W. Burrows, F. R. Farrow, J. Herrin, J. S. Edmeston, W. Gwyther, Gordon Smith, S. Collins, T. Greenwood, Lewis Angel, F. Hooper, W. G. Drew, E. W. Nightingale, T. W. Cutler, S. Hillyer, W. H. Webb, and Professor C. Unwin. The Duke of Fife distributed the prizes on Thursday to the successful competitors as follows:—Bricklaying—T. H. Smith and John Burgoyne, bronze medals, and Frank Mills, a certificate. Carpentry—W. Wyatt, silver medal; A. S. Sewell, bronze medal;

IMPROVEMENTS are to be carried out at the Burton-on-Trent workhouse, at a total estimated cost of about £2,000.

ON Tuesday afternoon last Mr. Thomas Codrington, Local Government Board Inspector, held an Inquiry at the Upton Asylum, Chester, into an application of the Cheshire County Council for the sanction of the Local Government Board to borrow £80,000 for the purpose of enlarging the asylum.

THE erection at Yeovil of the Cole Memorial Church, in Sherborne Road, is to be proceeded with. It is estimated that the cost will be about £8,000.

IT has been decided to form a limited company for the erection of a physical training college at Sheffield. The total cost is estimated at about £14,000, and it is proposed to raise £8,000 of this on mortgage and commence with £6,000 capital in £1 shares. There will be six shops underneath the college, which is to be built in a central part of the city, and is intended to be in position and equipment only second to that of Liverpool.

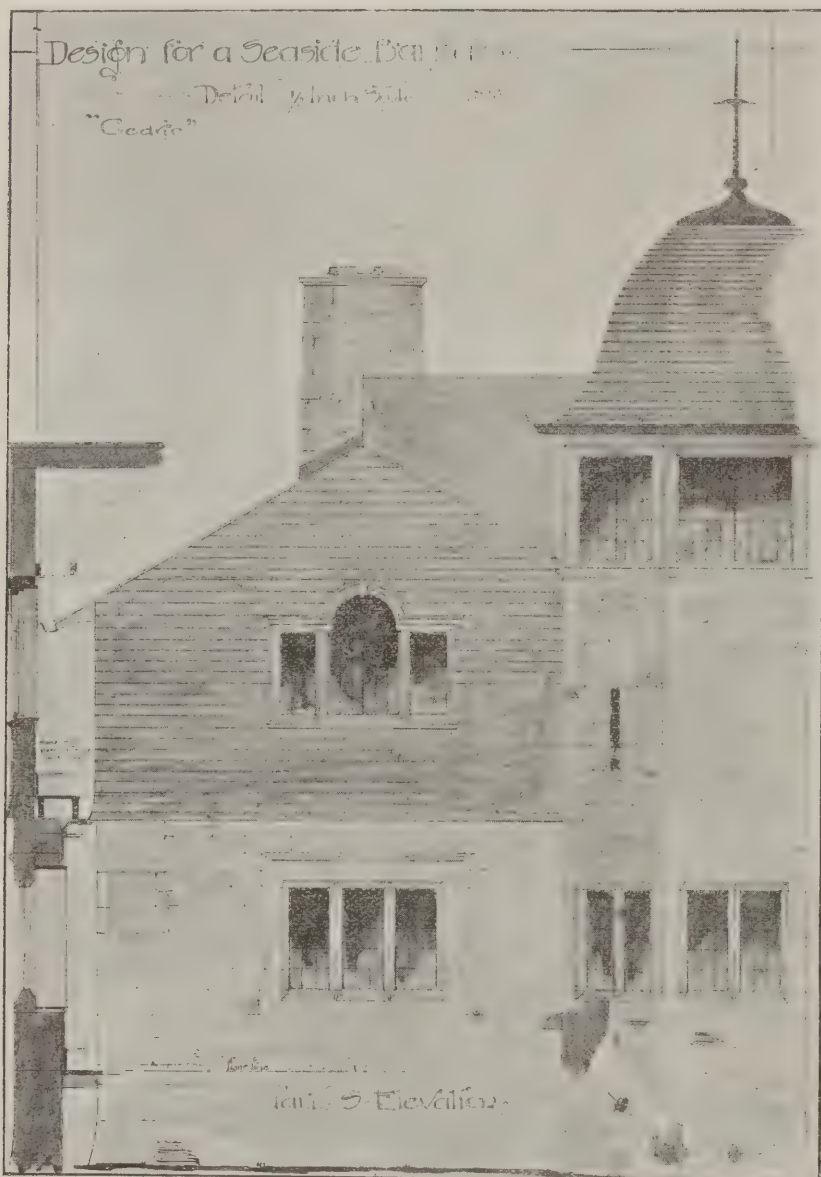
A POET ON PETERBOROUGH CATHEDRAL.

MR. WILLIAM MORRIS ANXIOUS.

MR. WILLIAM MORRIS, poet, printer—a mediæval man spirit in modern life—writes with reference to the Dean of Peterborough's account of the damage done to the West Front of Peterborough Cathedral:—"Everyone who has any interest in art or history," says he, "must be much moved by this accident and wish for its speedy repair. I may add, also, that for some years past it has been known that this magnificent work of art, which is by common consent the noblest and most beautiful of our English West Fronts, has shown

which it may be dealt with by its responsible guardians—the first would be the successful, the second the unsuccessful way. If treated successfully it will come out of this trial with its beauty intact, its external appearance unchanged from what we have known and admired in our lifetime. Unsuccessfully treated it will bear the appearance of a modern piece of work founded on an ancient design; and in that case it will have lost the greater part of its interest in the eyes of the historical student and the wide-minded artist; in short, it will have been 'restored,' and its genuine existence will have come to an end. That this is no chimerical danger is obvious from the fact admitted by almost all observers that all our great architectural monuments have suffered

engineering and building skill before the critical part of the work is undertaken; though the preliminary work of supporting and shoring the threatened parts should be put in hand as soon as possible. And again I must say that if the front be taken down and rebuilt, instead of being made safe in its place—as I cannot see any reason to doubt it may be—the work will not be done, but undone, and a lasting shame will lie upon all who are responsible for the preservation of the fabric. It would be a great relief, therefore, to all genuine lovers of the master art of architecture if we could receive an assurance from the Dean—1st: That as little disturbance of the surface of the building shall take place as possible, and that consequently no merely decorative features shall be reproduced in imitation of the old work. 2nd. That every device which skill and knowledge can suggest shall be exhausted before rebuilding be even thought of, and that consequently a committee of consultation chosen from the best (not necessarily the best known) engineers and architects shall be called together to consult on the various devices for making the West Front good. I think that the public have a right to ask the Dean for the fullest possible information of what is intended to be done before they respond to his very reasonable and necessary appeal for funds. I cannot doubt that he will give that information readily and freely."



signs of movement, probably due to some defect of the foundations caused by the draining of the fenland; so that a thorough search into its present condition has been recognised to be necessary. I must say, for my own part, that an intimate acquaintance with the West Front of Peterborough has made it so much a part of my life, that I long to see it put out of all peril by judicious repair and essential strengthening of its structure, and I have no doubt that the Dean shares this feeling with me. I heartily wish I could leave the matter here with a promise of what pecuniary aid I could afford; but there is another danger to which this great monument of English art is exposed besides that of falling into ruin. There are two ways in

more or less from the restoration mania during the last fifty years, and that some (e.g., Worcester and Lichfield Cathedrals, to go no further) have been almost destroyed by it. I am well aware that the difficulties in the way of successful structural repair of Peterborough West Front are, from the nature of the case, very great, that they are serious enough to tax heavily the skill and experience of the best masters of construction amongst us; but at the same time I am sure that they can be overcome by patience and the expenditure of a large sum of money. Only I think the occasion so important, that the burden of undertaking the work should not be thrown on one man's shoulders, and that a consensus should be held of the best

The Builders' Journal COMPETITIONS.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

MR. F. A. S. CRAWSHAW has been appointed surveyor to the Wortley District Council at a salary of £250 a year.

Awards of the Assessor.

No. 1.—A SEA-SIDE BUNGALOW.

The drawings submitted in this Competition were considered by Mr. Aston Webb, F.R.I.B.A., who has placed the sets in the following order:—

FIRST. "Cedric."

Mr. ARTHUR STRATTON,
University College, Liverpool.

SECOND. "Marvel."

Mr. SIDNEY HALL GOODWIN,
42, Albert Road, Croydon.

THIRD. "Dobenda."

Mr. DAVID B. DOBSON,
707, New City Road, Glasgow.

Certificates will be forwarded to the authors of these drawings as soon as possible, with cheques for half-a guinea.

THE SECOND COMPETITION.

A Village Club House.

The Proprietors of the BUILDERS' JOURNAL invite drawings, in competition, from those under twenty-six years of age, for a Village Club House, on a corner site, 150 feet by 40 feet. The Club to contain a general room with a dais for the villagers, a reading room and library, a bowling alley, service bar, tea room, committee room, housekeeper's apartments, and three cubicles for public use. The necessary outbuildings must be provided. Cost not to exceed £2,000. Drawings to be delivered at Talbot House, Arundel Street, Strand, not later than Monday, the 6th May, 1895.

COMMENTS UPON COMPETITORS' DESIGNS.

The examination of the drawings submitted in this competition has not been a very difficult task, for the details of the planning of a Bungalow appear to have been too much for the average student, and yet nothing could be simpler. The author of "Marvel" is the only one who has grasped the requirements of a "common hall," and his ground plan, so far as the relative position of his rooms is concerned, is good. "Cedric," however, has been more practical in his plan, and infinitely superior in his elevations. His study is cleverly placed and arranged, except for its fireplace, and it should have had access to the common hall. We are not quite pleased with a single bedroom, and that the principal one, on the ground floor, a day's journey from the bath room; but otherwise the plan has many good qualities, and we are glad to see that Mr. Stratton is working in methods that will bring him credit. We like his long, restful roof. The continuous demarcations between his stone walling and the slate-hung upper storey is also good, and his loggia is delightfully arranged. With his lodge and stabling we cannot find a single fault, but he must commence at once to devote more

care to the finish of his drawings. It has been a difficult task for us to reproduce the elevation of the sea front and the ground plan.

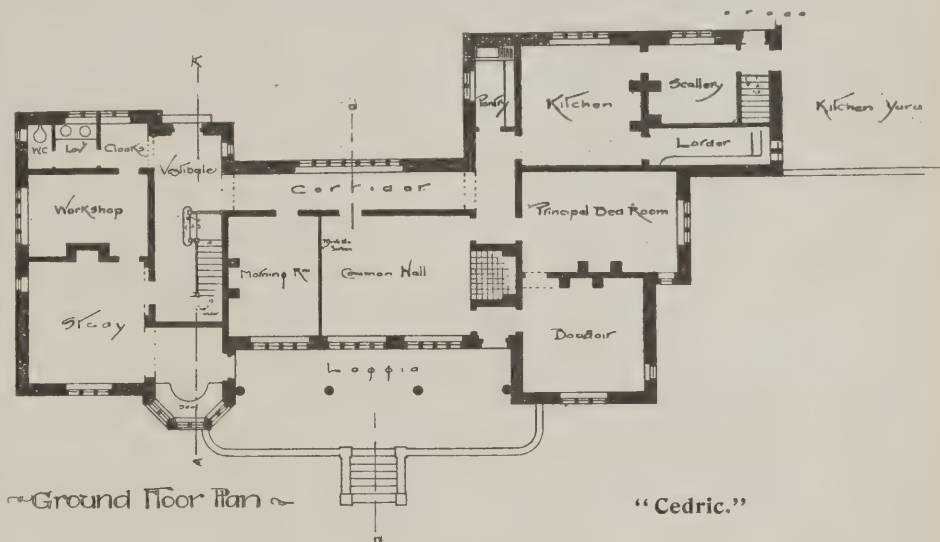
"Marvel" has laboured long upon his set, and his neatness is to be commended, but in practical drawings he will find his lines must be stronger. His ground plan, which, with elevations, we will publish next week, pleases us in its general scheme, but there are some serious blunders. The entrance from the vestibule to the hall should have been opposite the study door, the foot of stairs being set further back for the purpose. The cupboard in his oriel should give place to a "smoking" seat, and the "verandah" on the sea front is puny in the extreme. Mr. Goodwin has "gone to pieces" on the first floor. His landing or corridor should have been trussed out over the

would have taken him well to the front. A loggia of three feet wide and forty feet in length is, however, an anomaly. We shall give a couple of illustrations from this set.

"Herbert" has a good idea of a bungalow, although there are many serious faults in his plan. He walks straight from his porch into his "hall or dining-room," and he breaks his external walls up into all manner of bays and corners. The author has a good grip of design and only needs to cultivate it.

"Jupiter" gives us an extremely good hall and study, boudoir and best bedroom on plan, and his staircase is better arranged than any other, but his elevations are lacking.

"Pendragon" puts the whole of his accommodation on one floor, and we think he is justified. His plan has some extremely good quali-



hall. He would, by that means, have improved his ground floor, and have added vastly to the planning of his bedrooms; they are all too small. The elevations of "Marvel's" designs are far too severe, and like most of the competitors he is better with his lodge and stabling than with his house.

"Dobenda's" work, which we shall also illustrate next week, is like the two previous sets—a double storied design—although he finds it necessary to put three bedrooms on the ground floor. The plan is that of a suburban villa, and if a bit too irregular and unrestful, is not bad at that. There is a happy spirit in his elevation which, without the hexagonal bay and the semi-circular dormers, would build up far better than they appear on the drawings.

The drawings submitted by "Violet" give us pleasure. They are, in execution, the best sent in, and his perspective sketch discloses powers of good draughtsmanship. His elevations also are extremely good, but his interior planning destroys the possibility of a place. His common hall is, however, good, and its arrangement on the first floor would look remarkably well in execution. Had the author arranged his entrance in the middle of his long front instead of in the corner of a short one, he would have disposed his ground plan in a way which

ties, but here again his porch opens direct into his hall or dining room, with no possible chance of hiding the dining table from a persistent rate collector, and the kitchen block is "brought out" from the principal line of frontage. With these failings amended, and the elevations more tastefully treated, "Pendragon" would have scored.

We can spare no further space to comment on the work of the other competitors. Ambition to do big things has o'erleapt itself in many instances, and several young men are evidently playing some practical jokes with architecture; but perseverance is the great thing, and our young friends will find that our criticism of their work is offered in just the spirit that will emulate them to do better hereafter. They should interest as many of their fellows as they can in these competitions. Men between between twenty-one and twenty-six should be capable of sending us some excellent work.

THE Hampstead Vestry have decided to spend £5,260 in extending their system of electric lighting, and also to ask the Willesden District Council if it is willing to pay half the expense, estimated at £1,460, for laying the necessary mains, &c., in the High Road, Kilburn, which divides the two districts.

THE plans for the new Congregational Church, to be erected in Poulton Street, Kirkham, Lancashire, have been prepared. The edifice will be of handsome design with a tower, under which the schools will be arranged. There was also recently completed the first portion of a new church at Wesham, consisting of nave and aisles (the full scheme including chancel, vestries and transept, with tower and spirelet at west end), Messrs. Paley, Austin & Paley, of Lancaster, were the architects.



~ Elevation to Sea Front ~

"Cedric."

ARCHITECTURAL IRONWORK:
CONSTRUCTIVE AND DECORATIVE.

A Series of Instructive Papers for the
Artist and Worker.

CHAPTER VI.
BEAMS AND GIRDERS.
(Continued.)

REVERTING to the remarks upon the proper section for the cast-iron architectural members, we would point out that the ultimate form arrived at by Hodgkinson, as being the best and most stable, is that combination of a vertical central web, provided with a flange at the top and the bottom, of which we gave a somewhat rough diagram at Figure 10. In Figure 11, however, given in this present chapter, we give a more exact and detailed sketch, which is necessary for a due appreciation of the tables presently to be adduced. The chief principle of the girder, of which Figure 11 is a transverse section, is that the lower flange must contain six times the area of the upper one. The several proportionate dimensions—which have not been rigidly followed in the illustration, which is only a rough drawing—are taken as follows: 1. For the depth, the total dimension D. 2. For the breadth of the bottom flange, the width B, and for the two thicknesses, one is taken at the centre BB, the other B at the end of the flange. 3. For the top of the flange, the width T; and for the two thicknesses, one is taken at the centre TT, and the other T at the end. In this manner the dimensions of the flanges are quite independent of the thickness of the rib. 4. For the rib, the two dimensions RR and R are measured as continued to the extreme top and bottom surfaces of the girder, with a similar view of making these dimensions independent of those of the flanges, and promoting exactness in defining the whole section. The proportions of the rib are undetermined, but it is evident that they should bear some ratio to those of the flanges. The rib must be sufficiently rigid to prevent lateral weakness. Moreover, the very theory which maintains

the principle of the "neutral axis" (referred to in the preceding chapter), also recognises the increase of the forces of compression and extension upwards and downwards from the neutral axis, and this would, therefore,

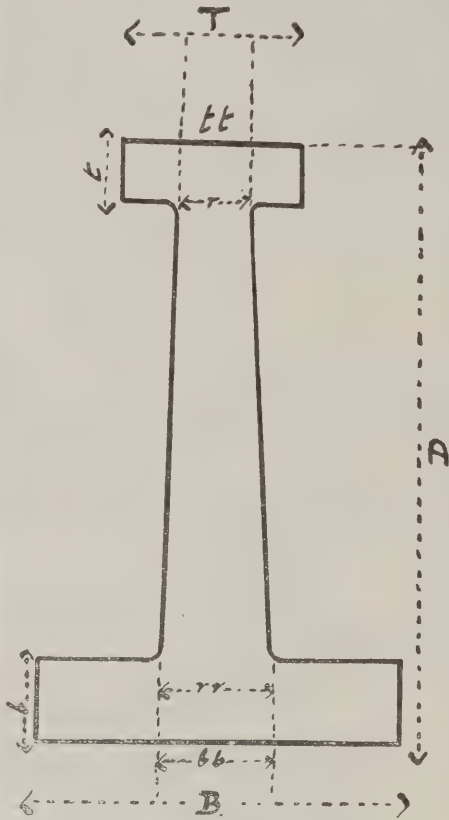


Figure 11.

lead to the adoption of a rib tapered in both directions. In practice it is found best so to taper the rib that it meets each of the flanges with a thickness corresponding to that of the flange itself, for if any great dispro-

portion exists it may lead to bad consequences in the founding, as the operation of casting the beam or girder cannot be so perfectly performed, from unequal shrinkage of the metal, and an imperfect casting, or one having flaws in it, renders futile all calculations of strength. Hodgkinson gradually varied the form of the section of girder in his experiments until the widths and depths of the flanges were as follows: Top flange, 2'33 in. wide, 0'31 in. deep; bottom flange, 6'67 in. wide, 0'66 in. deep; the areas being '720 in. and '44 in. The rib was '266 in. thick, and the total depth 5½ in. The constant, or C, was found to be 514 for cwts. and 26 for tons.

Most of the authorities on this important matter adduce very complicated algebraical formulæ. Instead of following their lead in this respect, we prefer to give the following reliable table, which gives the particulars of section of cast-iron main girders, calculated to support 1½ cwt. per foot superficial. For the letters at the top of the columns the reader will refer to Figure 11:—

The casting of girders and beams (and, indeed, of all other structural cast-iron work) the caution which we gave with regard to the stanchions, should always be borne in mind—that is to say, the internal angles must not be sharp. If they are, mischief will, in all probability, result in consequence of the arrangement of the atoms of the iron in reference to the planes of crystallisation, as explained by Mr. Wallet, and by us given *in extenso* in Chapter III. This may easily be provided against by fixing a splice or fillet in the angle of the pattern. In our succeeding chapter we shall deal with cast-iron and girders.

(To be continued.)

MR. R. WALTON, Local Government Board Inspector, recently held an inquiry at the Southport Town Hall, respecting applications by the Council for borrowing powers for further improvements on the foreshore and to extend the electric lighting in the borough. The Corporation are constructing a marine carriage drive, connecting the two lakes, and throwing over them a bridge, which is a continuation of the drive. For the completion of this work, £8,500 additional is asked for, bringing up the total to £29,250. For the electric light, £15,500 additional was asked for for street lighting and extended house connection. This would bring up the total sum borrowed for the purpose to £43,500.

A SITE for the New Liberal Club, at Accrington, has been secured, and the building is expected to cost £2,500. It is hoped to raise at least £1,000 towards this sum by the bazaar recently opened by the Mayor.

A NEW Wesleyan Chapel was opened on Thursday afternoon at Arthington. The building is of Early English Gothic design, from plans prepared by Mr. W. H. Beevers, architect, Leeds. It is constructed of Shipley stone, with Ashlar stone dressing lined with brick, and adjoining it is a schoolroom, together with vestry and caretakers' rooms. The total estimated cost is about £1,400. The principal contractors have been Messrs. Rhodes Brothers, of Shipley.

MRS. J. B. CLARKE, Local Government Board Inspector, held an inquiry at the Middlewich Town Hall, on Wednesday, respecting an application by the Middlewich District Council for permission to borrow £12,000 for a new water scheme.

In the competition instituted by the Belfast and County Down Railway Company for a sea-side hotel to be built at Newcastle at a cost of £25,000, the assessor, Mr. Alfred Waterhouse, R.A., has placed the premiated designs in the following order of merit:—(1) £100, Mr. J. J. Farrell, 6, Westmoreland Street, Dublin; (2) £75, Messrs. Gibson and Russell, 11, Gray's Inn Square, W.C.; and (3) £50, Mr. F. H. Tulloch, 39, Victoria Street, London, S.W., and Lionel Littlewood, 49, Doughty Street, Bedford Row, W.C., joint architects.

Extent of Flooring to be supported.					GIRDER DIMENSIONS.										
Length of Girders.	Breadth of Surface.	Surface.	Permanent Load on Surface.	Multiple of Depth and Area of Bottom Flange.	Depth.	Bottom Flange.				Top Flange.			Rib.		
						D	B	bb	b	T	tt	t	rr	r	
Feet.	Feet.	Sq. Feet.	Tons. Cwt.	Sq. Jn.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
20	20	400	30 0	600	24	16	16	16	16	5	1	1	1	1	1
					21	16	20	18	18	5½	1	1	1	1	1
					18	16	20	20	20	6	1	1	1	1	1
					15	18	20	20	20	6½	1	1	1	1	1
					12	20	20	20	20	7	1	1	1	1	1
20	16	320	24 0	480	24	15	16	16	16	4	1	1	1	1	1
					18	16	18	18	18	4½	1	1	1	1	1
					12	20	20	20	20	6	1	1	1	1	1
20	10	200	15 0	300	24	13	14	14	14	3	1	1	1	1	1
					18	14	14	14	14	3	1	1	1	1	1
					12	15	16	16	16	4	1	1	1	1	1
19	16	304	22 16	432	18	16	16	16	16	3½	1	1	1	1	1
					15	17	2	2	2	4	1	1	1	1	1
					12	18	2	2	2	4½	1	1	1	1	1
18	17	306	22 19	414	18	14	20	18	18	4	1	1	1	1	1
					15	14	20	18	18	4	1	1	1	1	1
					12	15	20	2	2	4½	1	1	1	1	1
18	13	234	17 10	315	18	12	12	12	12	3	1	1	1	1	1
					15	12	2	2	2	3½	1	1	1	1	1
					12	13	2	2	2	4	1	1	1	1	1
17	17	280	21 13½	370	15	12	20	18	18	3	1	1	1	1	1
					12	15	20	18	18	4	1	1	1	1	1
17	13	221	16 11½	281	15	10	20	18	18	3½	1	1	1	1	1
					12	12	20	18	18	4	1	1	1	1	1
16	16	256	19 15	316	15	10	20	18	18	3½	1	1	1	1	1
					12	13	20	18	18	4	1	1	1	1	1
16	12	192	14 8	232	15	8	20	18	18	2½	1	1	1	1	1
					12	10	20	18	18	3	1	1	1	1	1
15	14	210	15 15	237	15	8	20	18	18	2½	1	1	1	1	1
					12	10	20	18	18	3	1	1	1	1	1
	10	150	11 5	169	15	8	1	1	1	2	1	1	1	1	1
					12	8	2	2	2	2	1	1	1	1	1
14	11	154	11 11	161	15	8	1	1	1	2	1	1	1	1	1
					12	8	2	2	2	2	1	1	1	1	1
13	11	143	10 14½	140	15	7	1	1	1	2	1	1	1	1	1
					12	8	1	1	1	2	1	1	1	1	1
12	11	132	9 18	120	15	7	1	1	1	2	1	1	1	1	1
					12	7	1	1	1	2	1	1	1	1	1

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

Property Sales.—Little fault could be found with the competition at the Auction Mart, Tokenhouse Yard, last week. For the usual small brick-and-mortar investments there was a capital demand, freeholds in Hackney changing hands at from eighteen to twenty-five years' purchase of the existing rentals. A few good City lots were on offer, but, although bidding was fairly active, very little business was done. The public market for West-end residences is still unsatisfactory, but important transactions continue to be effected daily by private contract. It was an unusually heavy week for stocks, shares, and reversionary interests. Although the auction season for large landed properties will not begin till late in the present month, when the vast Somersetshire estate of Wrington will be brought to the hammer in Bristol, good business continues to be done by private treaty. Within the past few days Mr. Edwin Jones has acquired, for close on £20,000, the Herefield estate, near Southampton, comprising mansion, park, and 240 acres; Miss Penny, of Wellington, the Bearsden estate, near Exeter; and Mr. J. W. Newcombe, the Elms Park property of Sir A. de Capell-Brooke, Bart.

The Nautilus Grate.—We were very interested, at the Exhibition, in this Grate, made by James Petter, of Yeovil, and we have two in a country house, from which a couple of the old hob grates were long since removed. It is in many ways better than the ordinary dog grate which causes—owing to a deal of wood being burned in country houses—a deal of dust to accumulate. We cannot speak of the prices, but no doubt they are reasonable.

Wood Stains.—A solution of 50 parts of commercial alizarin in 1,000 parts of water, to which a solution of ammonia has been added drop by drop until a perceptible ammonia odour is developed, will, says a contemporary, give to fir and oak a yellow-brown colour, and to maple a red-brown. If the wood is then treated with a 1 per cent. aqueous barium chloride solution, the first named becomes brown, and the latter a dark brown. If calcium chloride be used instead of barium chloride, the fir becomes brown, the oak red-brown, and the maple a dark brown. If a 2 per cent. aqueous solution of magnesium sulphate be used, the fir and oak become dark brown, and the maple a dark violet-brown. Alum and aluminium sulphate produce on the fir a high-red, and on oak and maple a blood-red. Chrome alum colours maple and fir reddish brown, and oak Havana brown. Finally, manganese sulphate renders fir and maple a beautiful dark violet-brown, and oak a dark walnut-brown.

In re S. Elliott.—A first meeting was held on Friday under a receiving order recently made against Samuel Elliott, carrying on business as a joinery and moulding manufacturer, at Broad Street House, City, and Newbury. The business was stated to be an old-established and very valuable one, and hopes were entertained as to the formation of a company for the purpose of taking it over and working it for the

benefit of the creditors. The debtor attributed his failure to losses and expenses incurred in exploiting patents, and to heavy law costs. The accounts were not completed, but the liabilities are estimated at about £80,000. Mr. Reader stated that the debtor was not at present in a position to submit a scheme for the consideration of the creditors, and he consented to adjudication. The proceedings resulted in the appointment of Mr. Bayne, of Leadenhall Street, as trustee of the estate, with a committee of inspection.

Strike in the Leicester Building Trade.

—Meetings of both the master builders and the Leicester carpenters and joiners who have come out on strike were held on the 1st inst. At the meeting of the employers it was decided to engage skilled operatives, unionist or non-unionist, at 8½d. per hour—the advanced wage—on one condition, and that was that they should accept the rules which had existed since 1891, until a new code could be settled between the Masters' Association and the Operatives' Society. But as the operatives insisted on the adoption of their new rules *en bloc*, they remained out, and the deadlock continues.

The Fireproof Construction Company.

—This Company, of 11, Victoria Street, Westminster, send us the details of their exhibits at the Building Exhibition, which we had no space to notice. Their Soundproof Hygienic Partitions when finished and plastered both sides with the Company's Quick-Drying Hygienic Cement, are less than 3 in. thick, and their strength is equal to that of a 4½ in. brick wall. The work can be executed without noise or dirt, and for partitioning off offices in a building, partly tenanted, is a valuable feature. The manufacturers tell us that the partitions are in themselves less than one-fifth the weight of 4½ brickwork, but the interlacing binding procured by their system of clamping renders them perfectly self-supporting from wall to wall, so that if necessary any portion of the wall may be cut out, which is done simply by sawing, for doorways, &c., without in the least degree weakening the partition. This property also avoids the necessity of using an iron joist to carry the wall, as the work can be built straight on to the wood-floor, which is a very imperfect method of construction. The absence of any woodwork in this structure should be a recommendation for its adoption, as the inconvenience of cracked walls and dry rot are thus entirely obviated, as also the open space which in a lath and plaster partitioning makes such a grand receptacle for vermin and dirt. The partitions are also sound resisting, and have been used in musical cubicles to stop the noise of piano practice with great success. The same methods of construction, as are applicable to the walls of buildings, are also used for the fireproofing of wooden joist floors, which does away with concrete and iron and acts as a pugging as well.

Messrs. H. J. & C. Major, Limited.

We were much struck with the quality of the self-locking tiles exhibited by Messrs. Major, at the recent "show" at the Agricultural Hall. The colour—if not equal to the Brosley—was good and very even, and if the manufacturers can guarantee that a high wind would not strip their roof, we should gladly recommend them to the attention of our readers. The address of Messrs. Major, is Bridgwater, Somersetshire.

The residents of New Cross, Brockley, and Nunhead have a new open space. On Saturday, at half-past two, Mr. Arthur Arnold, chairman of the L.C.C., opened Telegraph Hill, which will be to the South of London what Primrose Hill is to the North—the elevation being very high and commanding fine views of the city—but it is more picturesque, being provided with two miniature lakes, some grass plots nicely laid out, and a bandstand.

In carrying out the work of restoration of the Chapter House of Durham Cathedral, as a memorial to the late Bishop Lightfoot, the workmen have unearthed the seat and sides of the ancient stone chair in which the bishops of the see from Carileph to Barrington had been successively installed.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

CURRENT PRICES.

TIMBER.			
K H B	4 x 11 1st & 2nd Yellow...	per Std.	£18 0 0
D O M	4 x 11 3rd	"	15 15 0
P B W	4 x 11 5th	"	9 15 0
S K B	4 x 9 1st & 2nd	"	15 15 0
P T W	4 x 9 3rd	"	13 10 0
↑ ↑ ↑	4 x 9 5th	"	10 0 0
M G & Co.	3 x 11 1st (Gromme) Yellow	"	14 10 0
N R A	3 x 11 2nd	"	14 10 0
D x M	3 x 11 5th	"	8 10 0
B S 1st S C	3 x 9 1st Onega	"	16 10 0
D D D	3 x 9 1st	"	15 0 0
H A B	3 x 9 3rd	"	13 0 0
D M	3 x 9 3rd	"	13 0 0
R S S	3 x 9 4th	"	10 5 0
M F D	3 x 9 3rd	"	9 15 0
***	3 x 9 5th	"	9 0 0
W S N	3 x 9	"	7 10 0
S K B	3 x 9	"	5 0 0
B A T	3 x 8 1st	"	12 5 0
S K A	3 x 8 1st & 2nd	"	8 5 0
H A B	3 x 7 3rd	"	10 0 0
O B B O L A	3 x 7	"	8 5 0
G H H	2 x 9 1st	"	11 10 0
H H H	2 x 9 4th	"	10 0 0
	2 x 8 u/s Yellow	"	8 0 0
	2 x 7	"	8 5 0
	2 x 6	"	7 10 0
	2 x 5	"	6 15 0
	2 x 4	"	8 0 0
	2½ x 7	"	8 10 0
F R 1	3 x 11 1st White	"	10 10 0
* P *	3 x 11 2nd	"	8 0 0
E F 1	3 x 9 1st	"	9 5 0
J A S	3 x 9 2nd	"	7 15 0
	3 x 9 1st Spruce	"	10 0 0
	3 x 9 2nd	"	7 10 0
	3 x 9 3rd	"	6 15 0
	3 x 11 1st Pine	"	26 0 0
	3 x 11 2nd	"	17 10 0
	3 x 11 3rd	"	10 10 0
H H H	1½ x 7 1st Yellow	per Sq.	0 14 0
D D D	1½ x 7 3rd	"	0 13 6
S B S	1½ x 7 1st	"	0 11 0
S A B	1½ x 7 2nd	"	0 9 6
S-TERTIA	1½ x 5 3rd	"	0 7 0
J F J	¾ x 6 mixed Yellow	"	0 8 0
Oregon Pine	... ..	per Std.	£12 to £15
Pitch Pine	... ..	per load	40s. to 52s.
Ash	fresh sawn	... ..	45s. to 52s.
Mahogany	Honduras (logs)	per ft. sup.	3½d. to 6½d.
	(large & prime)	"	9d. to 2s.
	Tabasco	"	3d. to 5½d.
	Panama	"	3d. to 5d.
	African	"	2½d. to 7d.
	(large & prime)	"	8d. to 2s.
	Cuba	"	3½d. to 9d.
Cedar, Cuba	... ..	"	3d. to 5d.
" Mexican	... ..	"	3d. to 3½d.
Sequoia (clear)	... ..	per ft. cube	1s. 10d. to 2s. 3d.
Birch Planks	... ..	"	1s. to 1s. 3d.
Beech Planks	... ..	"	9d. to 1s.
METALS.			
Iron—Cleveland Pig	... ..	per ton	34s. 5½d. to 34s. 7½d.
" Hematite	... ..	"	41s. 4d. to 41s. 6d.
" Scotch Bar	... ..	per ton	£5 5s.
" Best	... ..	"	£5 12s. 6d.
" Extra Best	... ..	"	£6 7s. 6d.
Yellow Metal Sheets	... ..	per lb.	4½d. to 4½d.
Copper—British, Best Selected	... ..	per ton	£42 10s. to £43
Sheets, Strong	... ..	per ton	£42 10s. to £43
Australian Fine	... ..	per ton	£42 10s. to £43
Lead—Pig	... ..	"	£9 18s. 9d. to £10
" Sheet, English	... ..	"	£10 to £10 2s. 6d.
Tin—English Ingots	... ..	per ton	£66 10s. to £67 5s.
Australian	... ..	per ton	£63 15s. 6d. to £64 5s.
Straits	... ..	"	per ton £63 5s.
Banca	... ..	per ton	£64 5s. to £64 10s.
Zinc—Sheet	... ..	"	per ton £18 5s.

THE Holland (Lincolnshire) County Council has decided to place an order with a Belgian firm for nearly 2,000 tons of granite for the main roads, instead of securing the whole of their supplies from the English quarries. The Councilors calculate that by this means they are saving 1s. 3d. a ton. The Council has previously placed orders with a Belgian firm in consequence of the cost of English granite owing to the heavy railway rates.

An enquiry has been held at Darlington into the application of the Town Council for sanction to a loan of £8,000 towards the cost of erecting a technical school. The total cost of the building will be from £15,000 to £16,000.

SOCIETY MEETINGS.

Glasgow Architectural Association.—The monthly meeting was held in the rooms, 114, West Campbell-street, on Tuesday evening last, Mr. A. N. Paterson, President, in the chair, when the secretary, Mr. Walter R. Watson, read a paper on "Sir Christopher Wren." The essayist gave an historical and descriptive account of England in the middle of the 17th century, and explained the state of general science and the architectural practice of the period. The chief events of Wren's interesting and eventful career were then alluded to, notably the visit to Paris, and it was showed under what advantageous circumstances that visit was made. Referring to the circumstance that Wren, unknown even as an architectural amateur, was selected to assist the surveyor-general, the lecturer remarked that he was at that time, more than any other man in the kingdom, equal to anything of national importance that might be required. His love for architecture was only a part of his sympathy for everything that could appeal to a man of genius. Had there been no mathematician of eminence besides himself, nor any remarkable poet, painter, or sculptor, Wren would have been all or any of these, as the necessity of the time might have required. The second part of the paper was devoted to a description of a few of the great architect's better-known works, and was illustrated by diagrams, photographs, &c.

Surrey Archæological Society.—The fortieth annual meeting of this Society was recently held at 8, Danes Inn, Strand, when the President, Viscount Midleton, occupied the chair. The report stated that the Council took this opportunity of returning the thanks of the Society to all who assisted in rendering the meeting successful. The part of the Society's "Collections" (vol. xii., part i.) for the year 1894 was issued to all members not in arrear with their subscriptions. In this part is a valuable paper on "Compton Church," by Mr. J. L. André, F.S.A., and one on "The Manor of Lambeth," by Mr. S. W. Kershaw, F.S.A. The catalogue of church plate is still being continued, as are also the extracts from Surrey wills. The "Visitation of Surrey" is drawing to a close, and the editors hope to finish it in the next part. The library still further continues to increase by exchanges from kindred societies, but from lack of funds it is impossible to keep up the binding of the various "Transactions" received. The number of members is 313. During the year 14 new members have been elected. By death the Society has lost 4 members, and by resignation 7 members; total 11: gain over loss, 3 members. Although not strictly within the limit of this report, the Council desires to refer to two events which have occurred in the early part of the year 1895. The first is to record the loss the Society has sustained in the death of Mr. J. W. Butterworth, a vice-president, and one of the founders of the Society. The second event to which the Council desires to refer is the issue of the "Calendar of the Feet of Fines for the County of Surrey, from Richard I. to Henry VII." For those working on the early history of the county, this Calendar will prove of the greatest service, for there is no calendar to this class of document in the Public Record Office. Mr. J. F. Eastwood said the Surrey County Council was about to build a science and art building at Kingston, which was to contain a county museum, and it was a question whether the County Council would receive and show their collections for them.

Dundee Institute of Architecture.—The first annual dinner of the Dundee Institute of Architecture, Science and Art, was held in the Royal Hotel, Dundee, on Friday night. Bailie Keith, President of the Institute, occupied the chair.

AN exhibition of railway appliances and inventions is to be one of the features of interest in the forthcoming summer season of the Imperial Institute. The display is to be held in connection with the International Railway Congress, which is to be opened by the Prince of Wales in June, and it will be located in special buildings in the south-east quadrangle of the Institute.

SAWDUST.

WE regret to announce the sudden death of Mr. T. C. Wakelin, Architect, of Merthyr, which occurred on the 3rd instant.

THE tender of Mr. H. A. Forse, for the erection of schools at Victoria Park, has been accepted by the Bristol School Board. The amount is £10,000.

THE re-opening of St. George's Church, Hanover Square, London, has been postponed until after Easter, in consequence of the electric organ not being completed.

THE illuminating power of gas largely depends on the shape of the burner employed. The smaller and thinner the flame, the more rapid the consumption, and the less the light.

A PAPER is to be read at the Society of Arts at an early meeting after Easter by Mr. R. E. Crompton, the well-known electric engineer, on "The Use of Electricity for Cooking and Heating."

THE Whalley sewerage works contract has been let to Mr. John Sharples, of Accrington, for £3,619, subject to the schedule of prices for extra work being altered to the satisfaction of Mr. Diggle, the engineer.

LORD MORLEY'S Committee of the House of Lords on Monday, passed the bill authorising the Edinburgh and District water trustees to borrow £750,000 for the construction of new works for obtaining an additional supply of water.

ACCORDING to the latest reports, there are in the World 140,384 miles of submarine telegraph cable. Of this total the various Governments own 14,480 miles of cable and 21,550 miles of wires. The balance is owned by private companies.

IT is with regret we announce the death of Mr. Thomas Andrew Sugden, of Keighley, formerly a member of the firm of Sugden and Smith, architects. Mr. Sugden, who was for a few years a member of the Keighley Local Board of Health, was 75 years of age.

OUT of 70 candidates, Mr. H. Ashton Hill, A.M.I.C.E., gas and water engineer to the Wallasey District Council, has been appointed to the post of chief engineer to the South Staffordshire Waterworks Company, at a commencing salary of £600 per annum.

THE Highway Committee of Blackburn, out of 59 applicants, has selected Mr. Thomas Vickers, aged 27, as assistant engineer. The salary is £130 per annum. The successful candidate served his articles with the late Mr. McCullum, Blackburn, borough surveyor.

A NEW Primitive Methodist Chapel is to be built at Wesham, Lancashire. The contract is let to Mr. W. Tomlinson, who expects to have the work completed in about six months. The site is on Garstang New Road. The architects are Messrs. Paley, Austen and Paley, of Lancaster.

MADAME SARAH BERNHARDT is said to have purchased a little island in the Bay of Naples, once owned by Fouquet, and in a castle there, which she means to restore to the semblance of its ancient architectural dignity, she intends to reside in periods of temporary retirement from the stage.

At the meeting of the Wetherby Union Board of Guardians and Rural District Council, held on Thursday, it was resolved that the Committee be instructed to procure an architect to draw up plans for an isolation hospital, at a cost of about £1,000.

THE new Baptist school-chapel in Brynland Avenue, Horfield, will be Late Gothic in character. Mr. Herbert J. Jones, of Bridge Street, Bristol, is the architect, and Messrs. R. Williams and Sons, of Surrey Street, in the same city, have taken the building contract at £2,100.

It is proposed to appropriate about 1,108 square yards of the piece of land on the south side of Burlington Street, Liverpool, for the construction of a free open-air bath, with all necessary offices, &c., at a cost of not exceeding £700, subject to the bath and buildings connected therewith being so constructed as to permit of the widening of Burlington Street.

THE memorial-stones have been laid of a new Wesleyan school-chapel at Lower Bebington, Liverpool, the erection of which has become necessary by the rapid growth of Port Sunlight. The complete scheme, which includes the erection of a new school at Port Ferry, will cost £3,000.

At the Russian town of Reni, at the junction of the Pruth and the Danube, a rich find was made lately of gold coins of the time of Philip of Macedon, the father of Alexander the Great. They are in excellent preservation, and 512 of them have already been seized by the police and sent to St. Petersburg.

RECENTLY Colonel A. G. Durnford, R.E., an inspector of the Local Government Board, attended at the Council chamber to hold an inquiry into the application of the County Council for permission to borrow £127,280 for the erection of a West Sussex lunatic asylum at Grayling Wells, Chichester.

AN application has been made by the Cheshire County Council, to which no opposition was offered, to borrow £80,000 for the purpose of extending the Upton Lunatic Asylum. Plans have been prepared by Mr. Grayson of Liverpool. The enlargement will provide accommodation for 416 additional patients, and will also embrace large farm buildings.

NEWS is to hand from South Africa, stating that Mr. W. T. Olive has been elected City Engineer for Cape Town, at a salary of £800 a year, and £200 extra for works in connection with the main drainage of the city. Mr. Olive was formerly chief engineer and assistant to the Manchester city surveyor, and during his ten years stay in that city prepared and carried out the works for the relief of floods.

At the last meeting of the Liverpool County Council it was agreed—first, to apply to the Local Government Board to borrow £40,000 for the building of new fire station buildings in Hatton Garden, and, secondly, to accept the tender of Messrs. J. Paterson and Sons, Soho Street, Liverpool, for the erection and completion of the buildings for the sum of £30,770. Plans of the proposed buildings were exhibited.

THE Wombwell Conservative Club in Park Street, Barnsley was struck by lightning during the storm last Tuesday. The iron stanchion used for more securely fixing the pinnacle in its place was torn from its bed, and with the stone work thrown down, and the electric current, tearing along the coping, knocked off the coping stones, and seriously damaged the slating of the roof. The club premises are of a strong substantial character, having been erected some seven or eight years ago especially for the use of the club; and although the roof was damaged the building itself seems to have suffered no injury.

At the monthly meeting of the Carlyle Society, held at Anderton's Hotel, London, Dr. Eugene Oswald, who presided, said that the committee formed to purchase Carlyle's house, Cheyne Row, Chelsea, as a national memorial, had up to the present received the sum of £1,612 in subscriptions, the German Emperor having forwarded a donation of £100. A large sum had been collected for the object in America. A sum of £1,750 was required for the purchase of the house, and, in addition, it had been decided to raise a further sum of £2,400, as a sustentation fund. The acquisition of the house now seemed practically assured.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BATHAMPTON.—For building School at Bathampton, near Bath. Mr. W. J. Wilcox, Architect, 1, Belmont, Bath:—

Webb, W., Bristol	£2,190 0 0
Smith, B., Bristol	2,105 0 0
Bladwell, H., Bristol	2,094 0 0
Wilkins, H., Bristol	1,924 10 0
Howard and Sons, Bath	1,887 10 0
Wibley, C., Bath	1,878 10 0
Long and Sons, Bath	1,840 0 0
Hayward and Wooster, Bath	1,797 0 0
Chancellor, E., Bath	1,675 0 0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS

2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, **PETERBOROUGH**.
Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.

MELLOWES & CO. Works, **SHEFFIELD**. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"Eclipse," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO

TILES MOSAIC FAIENCE Poole Dorset

The Builders' Journal is published at 3 a.m. on Tuesday mornings, and should be obtained from any Newsagent in the Kingdom the same day.

BECCLES.—For the erection of a house in Upper Grange-road, Beccles, Suffolk, for the Misses Coleman. Mr. F. E. Banham, M.S.A., Beccles, Architect :—
Allen, F. J., Beccles £315 5 0
Dunn, G. A., Beccles (accepted) ... 311 10 0

BECCLES.—For the erection of a house in London-road, Beccles, Suffolk, for Mr. A. R. Block. Mr. F. E. Banham, M.S.A., Beccles, Architect :—
Dunn, G. A. £638 0 0
Woodroffe, T. A. 598 10 0
Hindes, E. W. 560 0 0
Allen, F. J. (accepted) 508 7 0
All of Beccles.

BELPER.—For additions to school buildings, Long-row, for the School Board. Mr. Maurice Hunter, architect, Belper :—
Bodell, Ben £2,113 0 0
Ford and Co. 2,077 12 9
Wildgoose, L. T. 2,000 0 0
Hingley, A. 1,997 0 0
Walker, Jos. 1,920 0 0
Wheeldon Bros., Belper (accepted) ... 1,900 0 0

BETHNAL GREEN, E.—For adapting the premises known as the Abbey-street Schools, Bethnal Green, for the purposes of cookery, laundry, manual training, and house-wifery centres, and also as a school for special instruction, for the London School Board :—
Williams, G. S. S., and Sons £4,285 0 0
Reed and Son 4,204 0 0
Grover and Son 3,994 0 0
Lawrance and Sons 3,875 0 0
Willmott and Sons 3,850 0 0
Gregar, W., and Son 3,839 0 0
Calnan and Co., Commercial-rd., E.* 2,976 0 0
*Accepted.

CANTERBURY.—For laying-out playground, executing drainage, and erecting a drill shed and cloakroom at the new board schools. Mr. W. J. Jennings, architect :—
Martin, W., Ramsgate £1,377 14 0
Paramor, Margate 1,250 0 0
Gentry, F., Canterbury 1,215 0 0
Wilson, H. B., Canterbury 1,212 0 0
Adcock, W. J., Dover 1,179 0 0
Seager, L., Sittingbourne 1,137 0 0
Knock, Ashford 1,184 0 0
Hall, J. J., Dover 1,049 10 0
Brewster, Canterbury 1,049 0 0
Judges, W., Boughton (accepted) ... 879 10 0
(Architect's estimate, £1,078.)

GODALMING.—For the erection of cemetery chapels, lodge, &c., Eashing-lane, for the Burial Board. Messrs. Wellman & Street, architects, Church-street, Godalming. Quantities by architects :—
Smith, W. £3,150 0 0
Mitchell, Bros. 3,147 0 0
Hall, T. F. 3,140 0 0
Kingerlee, T. 2,867 0 0
Milton, F. 2,796 0 0
Peters and Son 2,735 0 0
Horn, G. 2,644 0 0
Harris and Son, Woking (accepted) ... 2,625 0 0

GLOUCESTER.—For building malthouse, &c., at the Docks, Gloucester, for Messrs. G. & W. E. Downing. Mr. Walter B. Wood, architect, 12, Queen-street, Gloucester :—
Forse, A. H. £7,950 0 0
Wilkins, G. H. 7,373 0 0
Jones and Co. 7,166 0 0
Jones and Son 6,970 0 0
Pattinson, S. & W. 6,854 0 0
Claridge and Bloxham 6,587 0 0
Wileocks and Co. 6,585 0 0
Lowe and Sons 6,100 0 0
Gurney Bros., Gloucester (accepted) ... 5,797 0 0

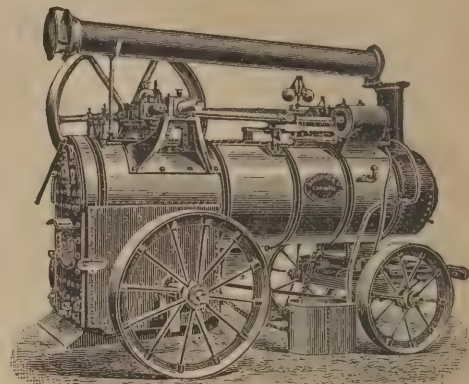
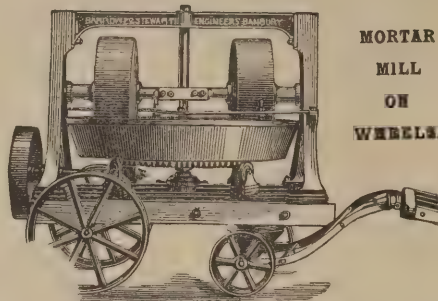
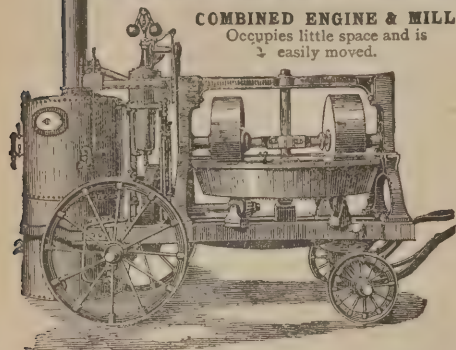
DRAIN PIPES CASTINGS

MACFARLANE'S

GLASS-ENAMELLED

SARACEN FOUNDRY, GLASGOW

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

DORCHESTER.—For re-building two shops and premises, High East and Bell-streets, for Col. R. Williams. Mr. A. L. T. Tilley, Cornhill-chambers, Dorchester, architect:—
Griffin, W., Broadstone, Dorset (accepted) ... £1,695 0 0

EDMONTON.—For new School at Raynham-road, Upper Edmonton, for the School Board for Edmonton. Mr. P. B. Freeman, architect, 3, Staple-inn, Holborn. Quantities by Messrs. Young & Brown:—

Britton, Fredk. ...	£22,086	0 0
Goodman, W. ...	21,028	0 0
Porter, Arthur ...	21,000	0 0
Wilmott, J., and Sons ...	20,910	0 0
Jarvis, J., and Son ...	20,626	0 0
Battley, Son and Holness ...	20,371	0 0
White, J., and Son ...	20,100	0 0
Longley, J., and Co. ...	19,900	0 0
Nightingale, B. E. ...	19,690	0 0
Allen, Fairhead and Son ...	19,448	0 0
Parnell, J., and Son ...	19,220	0 0
Treasure and Son ...	19,056	0 0
Lawrence, E., and Sons ...	19,043	0 0
Kirk and Randall ...	18,957	0 0
Hart, Percival ...	18,356	0 0
Shepherd, Wm. ...	17,988	0 0
Godson, G., and Sons ...	17,960	0 0
Hill, C. Gray, Coventry (accepted) ...	17,720	0 0

ELLAND (Yorks.).—For alterations, &c., to the offices of the Urban District Council. Messrs. Horsfall & Williams, architects, 15, George-street, Halifax:—

Birkby and Son, Wyke, masonry ...	£365	0 0
Crowthor, J. E., Elland, joinery ...	151	3 0
Bancroft and Son, Halifax, slating ...	71	11 0
Naylor, J., and Son, Halifax, plumbing ...	50	0 0

HARROW.—For building business premises at Harrow, for Mr. D. T. Ridden. Mr. W. Jennings, architect, Canterbury and Dover. Quantities supplied:—

Somerford and Son ...	£1,218	0 0
Willmott and Son ...	1,135	0 0
Sumner and Co. ...	1,088	0 0
Turner, T. ...	1,085	0 0
Godson and Sons ...	1,050	0 0
Brightman, C. ...	1,049	0 0
Chinchen, F. T. ...	988	0 0
Pryor, W. A. ...	950	0 0
Adecock, W. J. ...	896	0 0
Fortescue, W., 181, Queen Victoria-street, E.C. (accepted) ...	877	0 0

LIVERPOOL.—For erection of central fire station and police buildings in Hatton Garden:—
Patterson and Son (accepted) ... £30,770 0 0

LIVERPOOL.—For construction of covered service reservoir at Breeze Hill:—
Holme and King (accepted) ... £16,661 7 7

LONDON.—For proposed re-building of The Globe p.h., Borough-road, S.E., for Mr. George Evans. Mr. W. M. Bruton, architect:—

Rowe ...	£2,350	0 0
Courtney and Fairbairn ...	2,257	0 0
Hooper, T. ...	2,239	0 0
Whitehead ...	2,220	0 0
Edwards and Medway ...	2,216	0 0
Holloway ...	2,200	0 0

LONDON.—For external painting and repairs required to be done at the Licensed Victuallers' Asylum, Asylum-road, Old Kent-road, London. Mr. W. T. Potter, architect. Quantities prepared by Mr. C. R. Griffiths, 31, Farnival-street, Holborn, E.C.:—

Collings, W. H., and Co., Old-street ...	£1,049	0 0
Smith, W., Kennington ...	821	0 0
Walker, J., Poplar ...	694	0 0
Dawes, F., Peckham Rye ...	595	0 0
Pritchard and Renwick, Southwark ...	570	0 0
Hollingsworth, H. H., Peckham ...	559	0 0
Hayworth, S., and Sons, Kingsland* ...	497	0 0

*Accepted.

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

LONDON.—For constructing new offices for the boys and teachers of the Compton-street School, Goswell-road, for the London School Board:—

Knight and Son ...	£1,390	0 0
Kirby and Chase ...	1,380	0 0
Mallet, H. ...	1,187	0 0
Newton, G., Southwark-street, S.E.* ...	1,175	0 0

*Accepted.

LUTON.—For residence, shop, and bakehouse, Crawley-road, for Mr. D. Starkings. Mr. A. Wilkinson, architect:—

Saunders, J. ...	£1,456	0 0
Parkins, D. ...	1,380	0 0
Smart, G. ...	1,200	0 0
Kingham, G.* ...	985	0 0

* Accepted subject to amendment.

(All of Luton.)

LUTON.—For residence and stabling, Dunstable-road, for Mr. W. Withington. Mr. A. Wilkinson, Cardiff-road, architect:—

Dunham, W. G. ...	£997	0 0
Parkins, D. ...	887	0 0
Saunders, J. ...	810	0 0
Smart, G. (accepted) ...	735	0 0

(All of Luton.)

MORLEY (Yorks.).—Accepted for the erection of mill premises, Brentcliffe-lane, for Mr. B. P. Hepworth. Mr. T. A. Buttery, architect, Exchange Buildings, Queen-street, Morley. Quantities by the architect:—

Clegg, J., and Sons, Wesley-street, Morley, masonry, bricklaying, and excavating ...	£2,540	0 0
Auty, William, Chopell-hill, Morley, plumbing ...	58	17 0
Haley, E. and W., Bradford, iron-founding ...	435	0 0
Bently, John, Howdenclough, concreting ...	247	0 0
Atkinson, John, and Son, Leeds, slating ...	407	0 0

Total ... £3,687 17 0

MORLEY (Yorks.).—For the erection of hall and reading-rooms, Fountain-street, for the Temperance Society. Mr. T. A. Buttery, architect, Queen-street, Morley:—

Furness, D., Morley, masonry ...	£750	0 0
Hook, J., Armley, joinery ...	392	0 0
Wilson, E., Morley, plastering ...	125	0 0
Naylor, M. A., Morley, plumbing ...	76	0 0
Atkinson, J., and Son, Leeds, slating ...	50	9 0

NEWPORT.—For the rebuilding of two shops in Commercial-road, Newport, Mon., for Mr. F. E. Burpitt. Mr. E. A. Lansdowne, architect:—

Parfitt, A. E. ...	£1,020	0 0
Webb, T. ...	979	0 0
Reed, C. H. ...	962	0 0
Hatherley and Carr ...	950	0 0
Firbank, J. H. ...	948	0 0
Dimond, F. G. ...	940	0 0
Linton, J. ...	920	0 0
Jones, W., and Son ...	919	0 0
Jenkins, J. ...	910	0 0
Moore, W. ...	900	0 0
Price, W. ...	890	0 0
Lock, C. ...	875	0 0
Williams, R. ...	844	0 0
Richards, D. W., Newport* ...	838	0 0

(Accepted.)

WOODFORD.—For the erection of a dwelling-house in Churchfields, for Mr. R. N. Salter. Mr. J. Walter Wyles P.A.S.L., 7, Finsbury-pavement, E.C., architect:—

Mundy ...	£1,250	0 0
Reed ...	1,139	0 0
Catley ...	1,070	0 0
Jolliffe ...	1,018	0 0
Osborn and Sons ...	993	0 0
Slow and Punter* ...	925	0 0

* Accepted with modifications.

WORCESTER.—For alterations and additions to Draycott House, near Worcester, for Colonel Scott, R.A. Mr. A. William West, 44B, Maddox-street, W., architect:—

Steed, London ...	£2,077	0 0
Underhill ...	1,847	0 0
Stokes and Sons ...	1,779	0 0
Wood and Sons ...	1,779	0 0
Bromage and Evans ...	1,671	0 0

Rest of Worcester.

Reading Cases may be had on application to the Manager. Price, 2s. each.

COMPETITIONS.

BELFAST AND COUNTY DOWN RAILWAY.

COMPETITION FOR PROPOSED HOTEL AT NEWCASTLE.

Alfred Waterhouse, Esq., R.A., and the Directors have to-day awarded the prizes as follows:—

1st Prize.—James J. Farrall, Esq., M.R.I.A.I., 6, Westmoreland-street, Dublin.

2nd Prize.—Messrs. Gibson & Russell, 11, Gray's Inn-square, London.

3rd Prize.—Messrs. F. H. Tulloch & Lionel Littlewood, F.S.I., Albany-buildings, 39, Victoria-street, London.

All the plans sent in can, on application to the Secretary, be seen at the Belfast Terminus, by Architects and their friends, from TEN to FOUR o'clock daily from 1st to 6th APRIL, inclusive.

As the sealed envelopes of the other Competitors have not been opened, those of them who wish their names appended to their drawings should send in to the undersigned, a rough tracing of their block plan for identification.

THOS. J. BRITAIN,

Board Room, Belfast, Secretary.
March 29th, 1895.

TO ARCHITECTS.

THE FOX ALMSHOUSES TRUST.

DESIGNS, SPECIFICATIONS, AND ESTIMATES are invited by the Trustees of the late John Henry Fox, for not less than TWELVE, and not more than FIFTEEN, ALMSHOUSES to be erected on ground at Norton, near Stockton-on-Tees. Each almshouse to contain one sitting-room and one bed-room, with a kitchen behind and necessary out-offices. The superficial size of each sitting-room and bed-room must be 12ft. square or equal thereto. Also a room to be used as a common room, equal to 20ft. by 20ft., and a clerk's office, and a porter's lodge. The ground site is at present covered with buildings which will be cleared by the Trustees, who propose to appropriate as much of the ground as can be made available for an ornamental pleasure ground for the inmates. The cost of the required buildings must not exceed £2,500.

A plan of the site can be seen, and copies obtained, and all further information had at the office of the undersigned.

A prize of £20 will be given for the design which the Trustees may accept, and £10 for next in merit. If the architect whose design is accepted shall be disappointed architect for the work, the prize money shall be accounted for as part of his commission.

Designs, specifications and estimates are to be sent to the undersigned under a non-de-plume, accompanied by the name and address of the Competitor in sealed envelope, not later than the 13th day of MAY, 1895.

H. STOWELL CROSBY, Solicitor,
Clerk to the Trustees.

80, High-street, Stockton-on-Tees.

SMOKEY CHIMNEYS & DEFECTIVE VENTILATION.

THE "DULCE DOMUM" CHIMNEY TOPS & VENTILATORS (Downes' Patent).

The only Chimney Top which can be easily swept with the Ordinary Apparatus without being damaged. A Positive Preventative of Down-Draught, so Constructed that it Creates a Continuous and Powerful Up-Draught. Simple in Construction having No Movable Parts, Nothing to Oil or Repair. Cannot Get Out of Order. Strongly Made in Galvanised Iron. Once Fixed will Last for Years. Applicable also for Ventilating Public Buildings, &c.



Builders' &c., testimonials can be seen and prices obtained at the Patentee's Offices:—

11, THE PARADE, Lewisham High Rd., New Cross, LONDON, S.E.

The Builders' Journal.

Vol. I., No. 10.

Tues., April 16, 1895.

ILLUSTRATIONS.

Bungalow Competition:		
Third Premiated Design, by D. B. Dobson	145	
A Portrait of Mr. R. Phené Spiers	147	
Bungalow Competition:		
Plan of Second Premiated Design, by S. H. Godwin	149	
Bungalow Competition:		
Ditto West Elevation, by S. H. Godwin	150	
Ditto East Elevation, by S. H. Godwin	151	
Portrait of Mr. Cole A. Adams, F.R.I.B.A.	152	
Woodcliffe House: Mr. C. A. Adams, Architect	152	
New House, near Presteigne	153	
Design for Ceiling	154	
Bungalow Competition:		
Ditto A Perspective Sketch, by "Violet"	155	
Ditto Cross Section, by "Violet"	157	
Ditto East Elevation, by "Violet"	157	

CONTENTS.

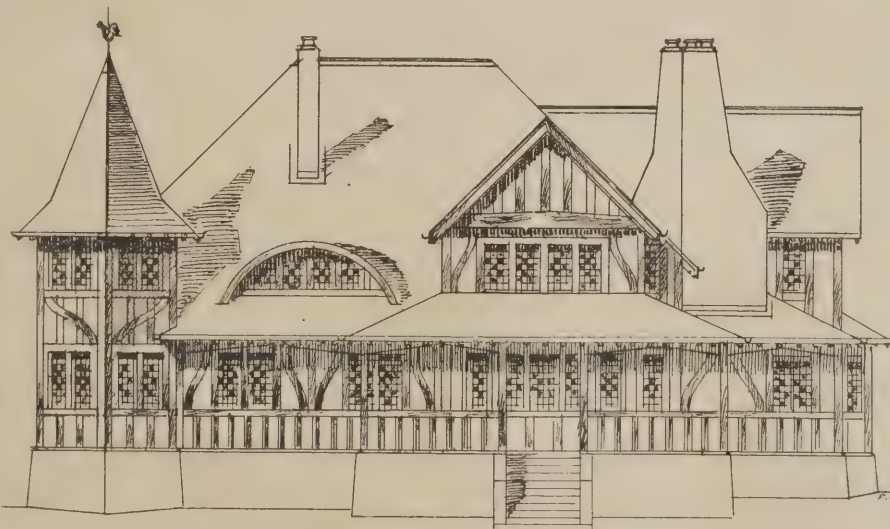
Gambling in Architecture	145	How to Prevent Dry Rot	147	Ancient Art, Preparing Paints	156
Slow Revival	145	Bricks and Mortar	148	Fourteenth Century Gothic	156
A Little Brief Authority	146	Architecture and the Eisteddfod	152	Sir F. Lockwood on Drawing	157
The Symbolism of Colour	146	Venetian Mosaic Work	152	Architectural Ironwork	158
Combination of Metals	146	Men who Build, No. 10—Mr. Cole A. Adams	152	Another Blow at the Building Trade	158
The Colour Decoration of Gothic Churches	146	An Assyrian Palace	153	Trade and Commerce	159
A Chat with the Master of the Architectural School of the Royal Academy	147	The Last of Soho	154	A Memorial Church at Llandudno	159
		A Model Technical School	155	The Builders' Journal Competitions	160

The Builders' Journal.

Gambling in Architecture.

THE flutter in the Architectural dovecote of Dublin over the result of the Portrairie Lunatic Asylum Competition is merely the periodic return of the big, black bogie of disappointment. In this particular instance competitive designs were invited for a lunatic asylum for the Richmond district, Portrairie, Dublin, and the cost of the whole thing was not to exceed £200,000. Twelve schemes were submitted, and the judges—Dr. J. M. Moody, of Cane Hill Asylum, Mr. G. P. Hine, of London, and Mr. Sydney Mitchell, of Edinburgh—instead of assessing the respective merits of the three best sets, simply bracketed all three together and left it to the wisdom of the Board of Governors, which had appointed them, to make a final selection from the premiated sets. It happens that one of the most pronounced "conditions" issued to competitors was the item of cost—"Economy of construction, and economy of working supervision and future extension," being strongly pointed. Two out of the three selected schemes had respected this condition, the other had ignored it, and by that means was able to produce a much more effective design. The Board of Governors—being composed of atoms of ordinary humanity—swallowed their conscience and the bait, and selected the author of the more effective set of drawings to carry out the work, *after* he has reduced the scheme down to the limit of the £200,000. The lucky competitor is Mr. G. C. Ashlin, R.H.A., a man perfectly capable of carrying through the work, but Mr. W. Kaye Parry, F.R.I.A.I., of Dublin—they also go in for alphabetical distinction in the Emerald Isle—has kicked against the pricks, and the decision of the Board of Governors, and has addressed a lengthy grumble to the Council of the Royal Institute of Architects of Ireland. We think Mr. W. Kaye Parry was perfectly justified in

his disappointment, in his grumble, and in the action he has taken, but he would have been far wiser to have given a good hearty laugh at the result and gone home profited by the experience. The Council of the Institute have replied to the "memorial" of Mr. Parry in the very excellent method of Councils. It deprecates the action of the Board; the assessors were not justified in doing this; they were not consistent in doing that; no opportunity should have been afforded to the other; and so on. No doubt this is balm to Mr. Parry's heart, but nobody but the authors of the other premiated designs care a brass farthing about it. It is extremely rough on conscientious men who accept restrictions and frame their schemes as closely as they can upon them, but we have, "in other places," frequently advised competitors to study human nature a little more and the con-



BUNGALOW COMPETITION.—THIRD PREMIATED DESIGN, BY D. B. DOBSON.

ditions of their work a little less. The modern system of competing for artistic work is a curse. Every architect admits it, especially *after* he has been successful once or twice; and one has only to turn to the big public buildings of our largest towns to see the awful mistakes the competitive system has to answer for. But then it is the only means of unearthing buried talent, and there is not so much of that running to seed that we can honestly disown all affinity between good work and competitions. At best, and at worst, it is a gamble, and as in all species of gambling, those who "know something" invariably come out top side.

Slow Revival. Slow but sure, we trust, are these signs of revival in the Australian building trades. The official reports that came last week, dated the end of February, are certainly of a re-assuring nature, not so much on account of the extra business actually done as from the indications afforded that the end of the prolonged depression has been reached. Australia has suffered even more than America from the wild and reckless jerrymandering of the speculator and the bogus financier. These new countries cannot support such a suicidal policy and retain their credit in the money market. It takes an old country, full of revenue and resource, and, we may add, respectability, to effectively face impending ruin and survive. Australia has practically been ruined, and she has her inherent English determination and her governmental association with the Mother Country to thank for having emerged from the crisis without perpetual paralysis. The attack was sharp, sudden; some thought fatal, but these reckoned without British blood and bone. We are, in our quiet way, a great believer in the force and energy, the art and labour of Britain, and so, even amid the thunder of bank crashes there was hope. This hope appears to be on the way towards security, though it is true that the respective Governments and private enterprise are timid still in building. The Australian Year Book tells of continued stagnation in architecture, but this may be because the slow and upward movement in building has not, so far, dared to call in Art and the muses. Plain buildings for utility's sake are ventured, while daintiness, or dignity, or decoration is kept in abeyance. But should the revival be sincere and strong, it will not be very long before the higher and happier inspirations are invoked and buildings shall rise, fair to see, and of noble origin and influence. At present Sydney and Melbourne are remembering their ambitions and are going in for external colour decoration. Those architects busy, seem to lean to the

Jacobean, following in the wake of our home tendency. New South Wales would appear to have been the most vigorous colony and the quickest in recovery. Over a quarter of million of money has been spent by the Government, mostly in the extension of buildings already in existence. Colleges, hospitals, asylums and schools constitute the major portion of the new work. Private enterprise has followed the sensible, if limited, lead of the Government. But when you come to consider styles you find more variety. Victoria, having suffered much, has spent little, and that little in repairs and additions. The same tale is told of Queensland and of South Australia, while Western Australia hardly yet counts in solid building. Yet, and notwithstanding all this, the individual trades bound up in building report renewed, if a modest, activity, and an all round improvement is eagerly expected and somewhat confidently anticipated. Melbourne is moving in iron. Iron tubing and builders' hardware, and better qualities of goods can be sold, and at Sydney building materials are actually going up in price. It is true that the galvanised roof still holds a good deal more than its own, and is progressing to the dismay of architects who can do little or nothing with this material. In New Zealand, happily, buildings are in demand, and can be sold at moderate profits. South Australia's home brand of "Portland cement" having been pronounced so excellent, and equal to the "English variety" should come in useful for its neighbour, and may establish stucco throughout the Australasian colonies, though we hope not. However, from many small straws, such as these, the highest Australian discerns the way of the wind, and that wind is "favourable." We wish it would blow our way, too.

A Little Brief Authority. A CASE was brought against Mr. Iliffe, a newspaper proprietor, by the Urban Sanitary Authority of Coventry. He was summoned for a breach of the building laws. This, we do not pretend to say, is singular; many men are guilty of common offences, and men who build are not yet too good for this World. But the details against the defendant showed somewhat of the temper in which these little parochial authorities approach building matters to the parade of their little brief authority. It was alleged that the defendant sent in plans for a large show, with showroom and stores above; also with back premises. Subsequently, a further plan was sent in for a stock-room over the said back premises. Now a vigilant official discovered that defendant had converted his premises to other uses after having had them built, the plans, we presume, having been passed in the first instance. For this and for some slight irregularity at the rear the defendant was summoned. His architect, Mr. Quick, stated that plans for conversion of upper rooms had not been sent in it was true, but defendant was not aware of this. Moreover, the new premises were "an ornament to the street," in place of old dilapidated buildings. The Bench imposed a nominal fine, but the case opens up the somewhat serious nature of urban and all other "authorised" interference. A man puts up a new block, changes his mind as to the use of his rooms, prefers bed-rooms to store-rooms after all, and is promptly pounced down upon by the authority. Truly, authorities are fearfully and wonderfully made, and we might add marvellously multiplied!

[“The Institute and the A.A.”—We had intended completing this article in the present issue, but such a mass of information and opinion has reached us that we deem it better to hold it over until next week. Ed.]

COMBINATIONS OF METALS.

A COMBINATION of copper and zinc makes bell metal, a variety of bronze of which bells are made.

A combination of tin and copper makes bronze metal, with a preponderance of copper.

A combination of tin, antimony, copper and bismuth, makes britannia metal.

A combination of tin and copper makes cannon metal.

A combination of copper and zinc makes Dutch gold.

A combination of copper, nickel and zinc, with sometimes a little iron and tin, makes German silver.

A combination of gold and copper makes standard gold.

A combination of gold, copper and silver makes old standard gold.

A combination of tin and copper makes gun metal.

A combination of copper and zinc makes mosaic gold.

A combination of lead and a little arsenic makes sheet metal.

A combination of silver and copper makes standard silver.

A combination of tin and lead makes solder.

A combination of lead and antimony makes type metal.

A combination of copper and arsenic makes white copper.

A combination of tin and lead makes pewter.

THE COLOUR DECORATION OF GOTHIC CHURCHES.

IN the great Gothic churches of our own country colour has rarely been employed on the exterior and always in a restrained manner and without injury to the general harmony, for the colour on porches and in niches is altogether insignificant in this point of view, and, besides, there is nothing to show that it was not added long after the erection of the structure on which it is found. One of the things most to be admired in these vast edifices is the art, or, if you will, the luck by which the builders have succeeded without colour, by having recourse only to Architecture and Sculpture, in giving to the exterior of the edifices a variety which in no respect injures the imposing effect of the whole. If we now regard the interior of these churches, the magic of the colour of the stained windows will complete the enjoyments the sight can receive from colour allied to Architecture, enjoyments which can only strengthen the power of the religious sentiment in those who enter these edifices to address their prayers to the God of Christians. If all the influences of painting have from the beginning really concurred with Architecture, and even with painted Sculpture, in the interior decoration of Gothic churches, it can only have been in a secondary degree, from the time when it had been decided to put in windows of stained glass, for no painting applied upon an opaque body, such as stone and wood, could sustain itself beside the brilliant coloured light transmitted by the glass. And if this painting had been graduated according to the rules of chiaroscuro, all its merit would have disappeared for want of pure and white light, the only kind suitable for illuminating it. Is it true that the vicinity of stained glass necessarily requires, as an effect of harmony, painting on contiguous walls? Without deciding absolutely in favour of the contrary opinion, it is to be confessed that, after reflecting also upon the deep impression received in great Gothic churches, where the walls present only the simple effect of light and shade upon an uniform surface of stone, where there are no colours except those transmitted by the stained glass, the sight of more varied effects would have appeared an error.

THE SYMBOLISM OF COLOUR.

THE symbolism of colour reached a transcendental point in the Byzantine school of religious painting, which still governs art in the Greek Church. We are so fortunate as to possess the actual code of rules drawn up to regulate it. This most curious manuscript—inspired, as the Orthodox believe—is kept at the famous monastery on Mount Athos. It was written by a monk, named Dionysius, in the tenth century; but he alleges, truly, no doubt, that he used a much earlier edition. The unbroken persistence, or rather identity of types in the Greek religious pictures, from the seventh century to the present day, had perplexed all who studied them until this discovery explained it. Not a detail is left to the artist's fancy. Not the Virgin only but every Saint whom he would be likely to depict is catalogued to the minutest touch—features, hair, attitude, equipment, and colour. It is roundly enacted that the flesh of all holy personages must be "yellow," and yellow it was, as we see, for ages. But in the last century Truth revolted against this item. Orthodoxy shuddered, and it found an uncompromising champion in a painter named Stroganoff, whose school is still honoured. He admitted that the code of Dionysius should be reformed. The flesh tints of a saint ought to be not yellow but dark green, and all the truly pious agree with him to this day. Symbolism could not go beyond that. Most obvious of all is red, to signify anger, hence, by a natural deduction, authority. Haroun Alrashid, we are told, used to dress in red when he felt inclined for an outburst. The Persian Shahs maintained this tradition until the present reign. Burton mentions that the Sultan of Darfur put on a red cashmere turban when he meant mischief, and the despatch of a red dress to any subject was an order to commit suicide. In China alone, perhaps, is red the colour of happiness and peace; the Celestial will always be an exception. Even white has been or is abhorred by some races, perhaps for the reason which Herodotus suggested in the case of the Egyptians, who hated a white pigeon—it reminded them of leprosy. All white animals are disliked in India. The Niger tribes sacrifice an albino upon occasions of great importance, but, perhaps, this is an honourable distinction. Palgrave notes a strange peculiarity of the Arab race in the matter of colour. They "habitually confound" green, brown, and black, using the words without discrimination, though, when challenged, they know the difference. Thus, for example, they say a mulatto is "green," a quadroon "grass green," an octoroon "emerald." Nowadays we can suggest an explanation which would scarcely have occurred to Palgrave. Arabs may be subject to a peculiar form of colour blindness. That curious malady indeed was recognised by science more than a hundred years ago, but the public resolutely declined to credit it. Regarding Arab colour-blindness, it may be observed that some etymologists derive not a few of our European names for tints from that language and the Persian. Thus "lake" is *lakki*; crimson, *germez*; "azure," *lazwerde*; the two last seem complex, but we transcribe faithfully. "Lilac" evidently is the Persian *lailak*, and "strawberry" applied to a horse, comes, no doubt, from the French *aubère*, which, it is likely, may be a corruption of the Spanish *hobero*; and in that case, perhaps, it is derived from the Arabic *habari*, bustard-colour, the plumage of that bird being mottled. But as for a French word *jargon* signifying "orange," and coming from the Persian *zergoun*—in the first place we demand evidence that there is any such word. And when it comes to deriving *rouge* from *arjwan* the mystery becomes too deep for sounding. But there is no improbability in the assertion that many of our colour names have been adapted from Oriental tongues. The industry and the civilisation of the Moors in Spain, whilst Christian Europe was a den of savages, would have that effect. Nearly all our names for "stuffs" of the luxurious class are Oriental.

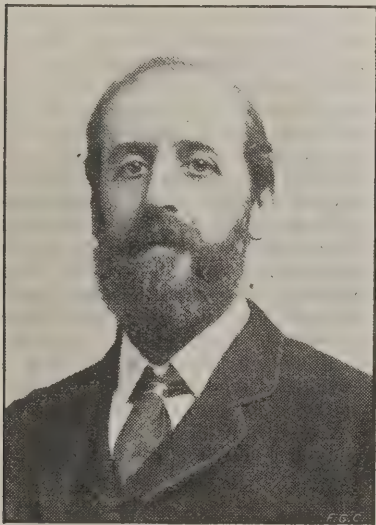
THE spring meeting of the Iron and Steel Institute will be held in London, on Thursday and Friday, May 9 and 10 next.

A CHAT WITH THE MASTER OF THE ARCHITECTURAL SCHOOL OF THE ROYAL ACADEMY.

THE STORY OF NORMAN SHAW'S WITHDRAWAL FROM THE INSTITUTE.

IF it was not that your mission was an important one, and the knowledge that Mr. R. Phené Spiers could enlighten you on many matters connected with the vexed question of examinations and architectural teachings in general, no prospective chat with any mortal being would have prompted you away from the glorious balm of the first spring afternoon, and beyond the sunshine which lifted all the heaviness and vexations out of one's existence.

It would not be just to say that Mr. Spiers was eager for the fray, he was merely ready, as all good workers are at any moment, to do battle in the cause they hold to be sacred. And surely there is no man more competent than he to gauge the mode of warfare. The surroundings were not inducive of contention. The little room in Carlton Chambers smacked of an earlier day. A few Dutch



tiles upon the mantelpiece and bits of various ware; a Scriptural oil or two upon the walls; a dozen or more water-colour sketches of country houses, very un-English, but very pure in style, severe and unaffected; a small collection of pamphlets and books, one of which, to-day is extremely useful. Mr. Spiers had gathered into one volume all the printed matter connected with the Institute examinations; there it was, beginning with Mr. Ashpitel's paper on Voluntary Examinations, read before the Architectural Association, on the 29th of November, 1862. This paper was the outcome of advances made by the Committee of the Architectural Association to the Institute that an examination should be instituted toward which the students might fashion their own work in the classes of the Association.

"Now, mark the development," says Mr. Spiers, still retaining possession of his precious book. "In January of 1863 the first examination was held, and again the following year, but there was a feeling of insecurity about the whole thing. You got nothing for your pains; no certificate; not even a letter from the Secretary; nothing but a notification in the Transactions that Thomason Swift had satisfied the Examiners of the Royal Institute of British Architects."

"Why was that?"

"One hardly knows! except that in those days the profession was somewhat like an omnibus, and the passengers inside, considering it was full, kept their knees together against all comers."

"In 1865 there were no candidates for examination."

"Really!"

"In '66 a few were scraped together, but in '67, '68 and '69 the scheme utterly failed. In 1870 a Preliminary was started, as it was feared the requirements of the Examiners had been too stiff, but both examinations dragged slowly along."

"And yet the energy of the Institute did not succumb?"

"Undoubtedly, no! But in 1882 the Compulsory Examinations were commenced, entitling the successful men to nomination for election as Associates of the Institute."

"And these Compulsory Examinations have been successful?"

"Yes; 641 candidates have passed, and during the ten years from '82 to '92 there have been an average of thirty men come up from the Architectural Association."

"And that is why you think, Mr. Spiers, that if the Examinations were suddenly stopped the A. A. would expire in three or four years?"

"Precisely. My expression was somewhat figurative. But I believe that many young men go through the classes of the A. A. in order to pass the requirements for membership of the Institute?"

Not being prepared to vouch for the individual integrity of the A. A. students I changed the subject. "Do you possess an opinion, Mr. Spiers, upon the Association itself?"

"I do. It is the most remarkable Institution I know of. No other profession in the World can show its equal. In any other country but this it would be impossible. Mutual and self-help, as you know, was the watchword in the earlier days, but the classes became too numerous, and now the Association has out-grown its initial ambitions and pays over seven hundred pounds a year in Lecturers' fees."

"Young men, young blood, new schools, new ideals, Mr. Spiers." But Mr. Spiers was discreetly not listening at the moment.

Mr. Spiers speaks with the utmost authority upon the Architectural School of the Royal Academy, for he has never released the reins of mastership since he first took them up, more than twenty years ago. It is quite true, he sadly admits, that the attendance is frightfully below what it should be, and all the inducements held out to students do not seem to bring them in. The stability of an architectural student is an unknown quantity. Students enter at the beginning of the term, but the staying power diminishes rapidly and fades away almost before serious work is started. The average attendance is too low even to be mentioned.

Before the chat ended, and you were once more in the delightful sunlight outside, we ventured upon discussing the Institute and many things connected therewith. But Mr. Spiers is of the old brigade and perhaps the wiser for it. He sees difficulties and appreciates them; he sees errors which he would wish retrieved; he sees rocks and knows the trouble in navigating round them, but as if he feared the difficulties were as apparent to you as to himself, he exhorts you to keep a perfectly free and open mind upon all things.

When we got to discussing men and matters, Mr. Phené Spiers spoke of the wonderful initiative of the late G. E. Street, and what good he did for the Academy Schools, and then, most interesting of all, how it was Norman Shaw came to sever himself from the Institute. In early days Shaw and Nesfield were in partnership, and occupied the same suite of offices. They had both just joined the Institute as Associates, when Professor Donaldson called to see Mr. Shaw to ask him to read a paper. Shaw was not in, but he saw Nesfield and told him he also

would be expected to deliver a paper at the Institute."

"What paper?" asked Nesfield.

"What paper!" replied the Professor, in mock horror—"What paper; don't you know that all Members of the Institute are *expected* to read a paper?"

Poor Nesfield protested that he had never read a paper in his life, and Donaldson retorted that it was an excellent time to begin.

Nesfield, taking Donaldson seriously, consulted Norman Shaw, who likewise affirmed that he had never written a paper in his life and never intended to.

"What's to be done?" queried Nesfield.

"Resign," laconically came from Shaw, and their resignations were posted the same night.

HOW TO PREVENT DRY ROT.

DRY rot is a misnomer. This disease in timber ought to be designated a decomposition of wood by its own internal juices, which have become vitiated for want of a free circulation of air. If you rear a piece of timber, newly cut down, in an upright position in the open air, it will last for ages. Put a piece of the same tree into a ship or into a house, where there is no access to the fresh air, and ere long it will be decomposed. But should you have painted the piece of wood which you placed in an upright position, it will not last long, because, the paint having stopped up its pores, the incarcerated juices have become vitiated, and have caused the wood to rot. Nine times in ten wood is painted too soon. The upright unpainted posts in the houses of our ancestors, though exposed to the heats of summer and the blasts of winter, have lasted for centuries, because the pores of the wood were not closed by any external application of tar or paint, and thus the juices had an opportunity of drying up gradually. On making some alterations in a passage, the writer put down and painted a new plinth, made of the best and apparently well-seasoned foreign deal. The stone wall was fast with wood and laths, and the plaster was so well worked to the plinth that it might be said to have been air tight. In about four months a yellow fungus was perceived to ooze out betwixt the bottom of the plinth and the flags, and on taking up the plinth, both it and the laths and the ends of the upright pieces of wood to which the laths had been nailed were found in as complete a state of decomposition as though they had been buried in a hot bed. Part of these materials exhibited the appearance of what is usually called dry rot, and part was still moist, with fungus on it sending forth a very disagreeable odour. A new plinth was immediately put down, and holes $1\frac{1}{2}$ inch in diameter at every yard were bored through it. This admitted a free circulation of air, and to this day the wood is as sound and good as the day on which it was first put down. If, then, you admit a free circulation of air to the timber which is used in a house (no difficult matter), and abstain from painting that timber till it be perfectly seasoned, you will never suffer from what is called dry rot.

MR. THOMAS TAYLOR, Queen Street, Oldham, is the architect of the new Board Schools in course of erection at Afghan Street, Derker, a suburb of Oldham. They consist of two distinct buildings, a Mixed School accommodating 1,120 scholars, and arranged as a Central Hall, with Class Rooms on ground floor, and gallery level, and an Infants' School for 33 children. The walling is of plastic bricks, and the floors of wooden blocks laid on concrete. The contract for foundations has been let to Mr. Whitworth Whittaker, of Oldham.

* One of the old bye-laws stated that on election every member was expected to read a paper or make a donation to the Library.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
16th April, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE spring meeting of the Iron and Steel Institute will be held in London on Thursday and Friday, May 9th and 10th next. The building operations at the Civil Engineers will prevent the meeting being held at their house, as has been the usual practice, and it will accordingly be held at the rooms of the Society of Arts. The presidential address will be delivered by Mr. David Dale, and the Bessemer gold medal will be awarded to Mr. H. M. Howe, the distinguished American metallurgist, who will contribute a paper on the hardening of steel. Mr. Stead, of Middlesbrough, will contribute a paper of great practical importance on the effect of arsenic on steel; Mr. Sergius Kern, Metallurgist to the Russian Admiralty, will discuss the manufacture of armour-piercing projectiles in that country; Mr. Herbert Scott will communicate a paper on the iron ore mines of Elba; and Mr. W. J. Keep, of Detroit, U.S.A., will contribute a paper on tests of cast iron.

If one, Mr. Richard Parry is to be believed, the majority of those persons on the look-out for a desirable residence had better expend their energies outside London. In an interesting paper read before the members of the Auctioneers' Institute, Mr. Parry summarised the essentials of a desirable residence as follows: (1) Well built, (2) dry, (3) well ventilated, (4) well drained, (5) supplied with good water, (6) well lighted, (7) well warmed, and (8) well planned. Mr. Parry noted the tendency of not only the wealthy, but the middle classes, to seek professional advice on the question of purchasing or taking houses for residence, and urged that, after a purchase, if dissatisfaction should arise through defects in part of the house not mentioned in the professional report, the surveyor should be discredited. Mr. Parry should have warned his audience against purchasing houses erected by incompetent persons without the assistance of an architect.

THE Art Loan Exhibition at Guildhall is in so forward a state as regards the reception and hanging of the treasures lent by their owners, that the Library Committee of the Corporation is enabled to fix the ceremonial opening by the Lord Mayor for Saturday, the 20th instant, which day, and also Monday, the 22nd, will be reserved for "private views," admission being by ticket. The Queen is again a contributor.

A NEW Pulpit and Baptismal Font for the Catholic Church at Malton, Yorks, have been erected. The Pulpit is of Caen stone, and is in the Decorated Gothic of the thirteenth century. The front is divided into five panels, with coves and angles, showing beaded mul-

lions and arches over recesses deeply sunk, with plate tracery, trefoils, quarterfoils, &c. There is an ornamental book-rest, supported by mouldings from mullions and cornice above. The sides are pierced, and show beautiful examples of bar tracery, to correspond with the front. There are two plain panels between plinth and string, which are left for carving to be done hereafter. The Pulpit is fixed against the south wall of the Church immediately outside the communion-rail, and is entered from the sanctuary between two ornamental pillars. The work has been executed by Mr. Lyons, of Norton, near Malton. The Baptismal Font, which harmonises admirably with the Altar, Pulpit, and other architectural features of the Church, is the gift of Mr. Lyons. The base is of Robin Hood stone, polished; the shaft and capital, of Roche Abbey magnesian limestone, circular and moulded. The Font itself is of Carrara marble, octagonally planned. The lid, of dark brown oak with brass fittings, assumes the form of a cone, surmounted by a cross. The Font stands in the south-west corner of the Church, and has the following inscription carved on the base: "Ex dono Antonii Lyons, A.D. 1895."

THE German Department of Telegraphs has been carrying on an investigation with a view to determining what effect the telephone wires in cities have on atmospheric electricity—whether the danger from lightning is increased or decreased by the presence of the miles of wire now necessary in cities in which the telephone is extensively used. The result of the investigation has been to show that the wires tend to weaken the severity of thunderstorms and to decrease the danger from lightning. From information received from 340 cities with telephone wires, and from 560 without them, it appears that the danger of damage by lightning in the two classes is as 1 to 4·6. Although, as is the common experience, the danger from lightning is greater in the country than in cities, and it is therefore to be expected that the towns without telephones, which are generally country villages, should show a greater percentage of damage by lightning than large cities, yet the difference cannot be more than 50 per cent.; while in the figures just given it is seen that places without telephones are almost five times more liable to damage by lightning than the places with telephones. A further interesting point is this, that in the places without telephones, five lightning strokes on the average occur during every hour of thunderstorm activity, while in cities with telephones only three occur. It appears, therefore, that the presence of many wires in our cities is a protection against damage by lightning, a rather singular, if safe, conclusion.

THE Parish Council of Barrow, near Leicester, has been the first to distinguish itself by defying a Government Department. By the Act of 1894, where the area of the Burial Board is co-terminous with the parish, the Council takes over all the duties and powers of the old board. They are bound to provide a burial ground for the parish, either within or without it, and to divide it into two parts, consecrated and unconsecrated (16-17 Vic., c. 134, s. 7), or to provide separate and distinct burial grounds (20-21 Vic., c. 81, s. 3), and for this they must obtain the approval of the Home Secretary, and this the men of Barrow have failed to secure. The action of the Home Office is awaited with curiosity.

YET another "poster problem." The C.C. will now have to adjust its spectacles and adjudicate upon Mr. Julius Price's striking poster for "An Artist's Model" now upon the hoardings. The Vigilance Association objects to models of any kind, and

Sir John Bridge is to be asked, in the first place, for his opinion. This obtained, no doubt the C.C. will be busy. This poster is a picture of a very prepossessing young lady whose attire, whatever it may be, is concealed by a large palette which she is holding out in front of her. There have been threats and remonstrances and protests and reports. The police authorities took official possession of a copy, which is to be reported upon by an expert. If it is hung up in Scotland Yard, it will do something to give a much-needed touch of cheerfulness to that sombre building. It is objected to by some people on the ground that, although it undoubtedly gives the idea of an artist's model in professional attire, still it conveys a false impression as to the richness of the costumes in the play. Sir John Bridge seems to be in the enjoyment of a happy time, but it is a good thing for him that only one "Model" holds the legal field—or rather, we should have written, "wall!"

UNDER section 25 of the Metropolitan Gas Act of 1860, London gas should be tested against the light of sperm candles of six to the pound, each burning 120 grains an hour. Avoiding mathematical perplexities, this is equivalent to the illuminating power of 16½ candles. The question naturally arises as to the quality of the testing candle, and it is a question which can be fought out very acrimoniously by three parties—the gas referees, the companies, and the candle-makers. First, a sperm candle, or, as the technical authorities describe it, a spermaceti candle (which is composed of sperm and a proportion of wax to break the grain), is the best form of candle; a tallow, wax, or paraffin candle being of considerably less quality. Yet there are candle-makers and candle-makers, and one can produce a better article than another. But it may be gainsaid that, as the test candle alluded to is described in a most bewilderingly technical manner by the gas referees, so as to fulfil most detailed conditions of weight, quality, and make of wick, there should be no difficulty in satisfying the requirements of the Act. The fact remains, however, that the test candles vary, and that the gas companies are quite alive to the advantages of getting as poor a specimen of the test candle as possible, because even one candle power less than the 16½ means many thousands of pounds. The gas referees, in spite of their elaborate notification as to the methods of making test candles, actually suggest that the wicks should first be washed in distilled water before steeping them in the preparation with which they are "dressed." In the opinion of a well-known manufacturer, this is a very untechnical suggestion; but the fact is, the apparently prosaic art of candle-making is more occult than is generally supposed, and the secret of "dressing" wicks burns only in the breast of the maker, transmitted from father to son. The interest of the public should certainly be to obtain the best test candle which the Act allows.

AMONG many interesting and important objects of art recently sold at Christie's, the more notable were to be found in the valuable collection of silver and silver-gilt plate, removed from Wimpole Hall, Cambridge-shire, the seat of the Earl of Hardwicke. Very high prices were paid for examples of the work in silver of Paul Lamerie, among which were a large sugar-caster, chased with lions' masks, 11 in. high, dated 1740, £176 19s.; a circular flat bowl, with fluted border, chased with female heads and flowers, dated 1725, £266; a pair of two-handled cups and covers, with bands of openwork, strap ornaments and masks, 12½ in. high, dated 1723 and 1736, sold separately, but realising a total of £552 9s.; two oval soup tureens and covers, the handles formed as dolphins, also sold separately, and realising

a total of £430 16s.; a circular sideboard dish, the border richly chased with masks, scroll ornaments, &c., date 1725, £393 15s. Only buyers possessed of decent bank books had a look in, for old silver is very tempting—except to the poor—and they have no eye for these things unless one accounts the honest burglar poor.

THE Lord Mayor makes an appeal in the name of the Council on the Dwellings of the Poor. Sir Joseph Renals says: "During the past twelve months alone the paid inspectors working from the central office have made 7,759 visits to alleged insanitary properties, and such cases as were found necessary were reported to the local authorities with marked success. The expenses of the Council are not heavy, but, inasmuch as the measure of the work to be done is limited only by the resources of the fund at command, and as the Council has thoroughly established itself as a proved and trusted friend of the poor, I have no hesitation in asking the wealthier citizens of London and inhabitants of the Metropolis to strengthen the Council's hands by becoming annual subscribers, or by sending donations." It is needless to add that a Lord Mayor of London never appeals in vain.

THE fact that the sum of £750 was contributed in one evening is strong evidence that the people of Walsall appreciate that noble institution, the Walsall and District Hospital, which is so closely identified with the name of Sister Dora. But, to restore the building, £1,800, it is estimated, will be required; or, if medical wards are to be added, £3,000. In the town and surrounding districts are 40,000 workers, and it is suggested that each one of these should work one hour per day overtime for a week (a plan already adopted in some places), and allow the employers to pay the wages for the same to the fund. Then, probably, at least £2,500 would be realised from the working men alone—a sum sufficient, with that already in hand, not only to restore the damaged buildings, but to build the medical wards, which the town so greatly needs.

PRIMITIVE Architecture, we should have thought, would be the characteristic of the Cathedral on Wheels, run by the Right Rev. William David Walker, the Bishop of North Dakota. The "Cathedral" is a railway car specially built at Pullman, Illinois, at a cost of 3,000 dols., to visit the widely scattered villages on the lines of the Northern Pacific, Chicago, Milwaukee, and St. Paul, Great Northern, and "Soo" Railroads, within the limits of Northern Dakota. It is 64 feet long, and lo! its principal external feature is a Gothic projection or Transept! At one end is the Chancel, with altar, lectern, and font, and at one side is a cabinet organ. The body of the Cathedral is equipped with 80 chairs. In the rear of the Chancel is what Bishop Walker calls the episcopal palace. By day it serves as a study, rectory, robing room, and, on occasion, as a kitchen. At night a berth is let down, and the episcopal palace becomes the bishop's bed chamber. This

travelling Gothic is, surely, the latest attempt in Renaissance!

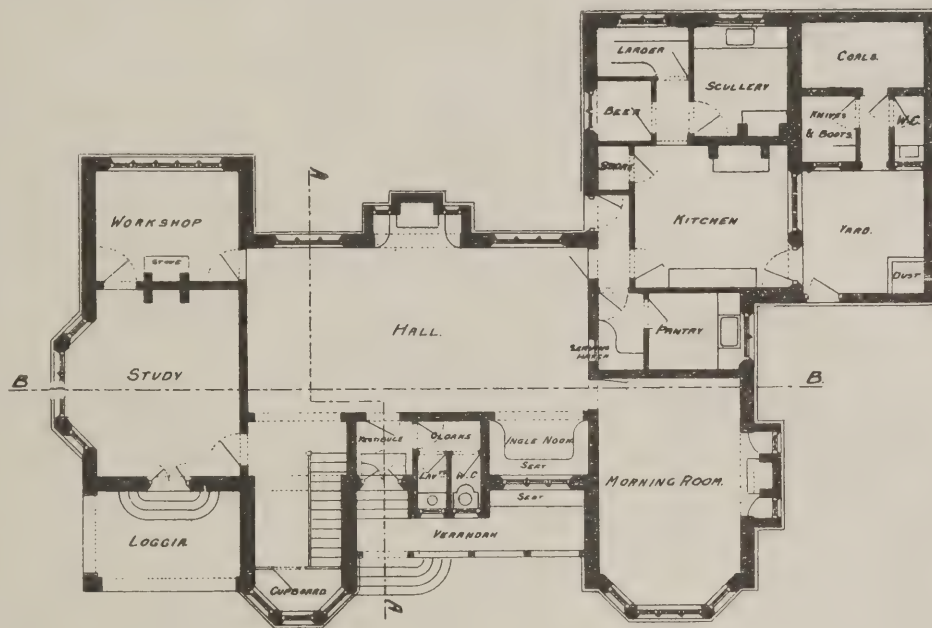
COMPARISONS of cost between the new Baltic Canal, soon to be opened, and the Manchester Ship Canal, accentuate the sad case of the latter. The German enterprise cost £7,800,000 for 61½ miles; the English £15,500,000 for 35½ miles. Their respective costs per mile were £126,858 and £436,619. It is true that they are widely differing enterprises; but one of the most important differences is connected with the fact that the original estimate for the German work has not been exceeded. The tendency of engineers to under-estimate has been successfully resisted by the Germans.

AN old Gobelin of the seventeenth century, hitherto kept in the Hohenzollern Museum, the work of Abraham Begyn, who went to Berlin from Holland in 1697, and was noted for his architectural perspective pictures, has just been repaired and taken to the Royal Palace in Berlin. It represents the deed of the great Churfurst, and measures about 5 yards high by 4 yards broad. The moth-eaten places having been repaired

caverns in the chalk having deep narrow vertical entrances" which exist in groups in various parts of England, especially along the Thames in Essex and Kent, and to which this name is applied, have been a puzzle to antiquaries from the time of Camden. The first scientific exploration of a group of deneholes was undertaken some years ago by the Essex Field Club at Hangman's Wood, near Grays, where within a space of four acres there are seventy-two of these pits. Each shaft is about eighty feet deep, and widens out at the bottom into a broad "vestibule," round which are ranged "six spacious crypt-like chambers" in a double trefoil pattern. A chamber is usually about thirty feet long, eleven or twelve wide, and eighteen high, and may lie towards any point of the compass. Deneholes cannot date back to the Stone Age, because the marks of the metal picks with which they were excavated are still quite fresh. Pre-historic man might have dug out the chalk in the search for flints, but Mr. Christy declares most positively that the flint bands which show in the sides of the chambers have never been worked out, as at the well-known pits at Brandon or Cissbury.

In early traditions these deneholes were regarded as the "deserted goldmines of the British King Cunobeline," but though they never yielded any mineral more precious than flint, this theory of their British origin cannot be disproved. It is just as hard to ascribe to them a definite purpose.

ALTHOUGH there is not to be a Domesday-book for London showing the various owners, we are to have a ground plan which will show the leading estates. It is reported that this scheme is making progress, and that 206 estates have been delineated on the map—representing one-fifth of the total area.



BUNGALOW COMPETITION: PLAN OF SECOND PREMIATED DESIGN, BY S. H. GODWIN.

with new threads, and the tarnished silver by new, the whole composition has regained its pristine brilliance. The subject is the siege of Stettin, with batteries and groups of generals and soldiers. A broad and rich border with warlike emblems surrounds the centre picture. The great Churfurst always intended to have the military acts of his reign represented in Gobelins, and after his death his successor religiously carried out his intentions. The value of this old Gobelin is estimated at about 300,000 marks.

THE New English Art Club showed signs of improvement in its last exhibition, but this year's show is less impressive. The pictures, for the most part, are of that wild impressionist style which characterised the earlier exhibitions of the club. There are, however, a few brilliant pieces of work, such as "A Portrait," by Mr. Roger E. Fry, and "Battersea Church," by Mr. C. E. Holloway. The exhibition is poor indeed in comparison with what was expected after the cultured and convincing work of last year.

MR. MILLER CHRISTY'S amusing paper "On Deneholes" in the *Reliquary*, will serve the useful purpose of letting people know what a denehole is. The "ancient artificial

THE widening of Wellington-street at its junction with the Strand is again being considered by the Improvements Committee. A former scheme was rejected because the freeholder, the Duchy of Lancaster, ruled out "betterment." It is now proposed to buy a narrow strip of land (1,096 square yards) at the eastern side of Wellington-street, which would widen the Strand at this point 64 ft. to 80 ft., by rounding off the corner. The leaseholder is the National Telephone Company, which is ready to sell for £6,000, while the Duchy requires £10,000 for the freehold. The Council would have to bear all costs and expenses of the sale, and would have to pave the new portion of the street. Would the Strand Board of Works contribute towards the cost? The Improvements Committee suggests that the present opportunity is a "very favourable one," and that "an expenditure of seven or eight times the present cost will have to be incurred in the near future, as is inevitable, if the improvement has to be carried out under the ordinary conditions of compensation."

UNDER the will of the late Mayor of Kendal (Alderman Wm. Bindloss), the testator bequeaths £3,000 as an additional sum to the £7,000 already given by him for a Chime of

Bells for the new Kendal Town Hall. He also bequeaths his family residence, Castle Green, Kendal, and surrounding land and buildings, together with Castle Green Farm adjoining, to the Kendal Corporation for the maintenance of the Kendal Town Hall; and £30,000 for the extension and improvement of the Kendal Water Supply. He also leaves £1,000 upon Trust for the purchase and conversion of his Hospital at Milnthorpe, near Kendal, into a block of Almshouses, together with £1,000 for maintenance of the same; £1,000 to the Royal Albert Asylum, Lancaster; £1,000 to the Westmoreland Schools, London; £200 to Kendal National Schools; £1,000 each to Middlesex Hospital, St. George's Hospital, and King's College Hospital, London; £1,000 to the Church of England Waifs and Strays Society; also a large number of private legacies—all free of duty.

EXTRAORDINARY enthusiasm has been aroused in Greece by the project of reviving the Olympian games. An Alexandrian merchant offers half-a-million drachmas—about £17,700 sterling—for the restoration of the Stadium, so that the games may take place on their proper ground, and with their ancient surroundings. It does not seem extravagant, after what has been done, to expect that his example will be contagious and that the work will be taken in hand. Whether it can be completed in time for next year's "international contests" is doubtful. But the construction of the Stadium was simple. It consisted of a hollow space scooped out of the ground, 680 feet long and 130 feet broad; and it was cut round into tiers for 40,000 spectators. These tiers were furnished by Herodes Atticus with Pentelic marble; and in marbles Greece is still one of the richest countries in the World. But will all the spectators wear sandals?

EARLY in June the new gallery of ancient paintings in the Palazzo Corsini in Rome, to be called the "Corsini Gallery," will be opened. It will be composed for the most part of paintings from the gallery of Prince Torlonia, and some ceded by the Government, hitherto kept in the ancient gallery of the Monte de Pietà, joined to those already existing in the Corsini Palace, which is now closed till the time appointed.

THE Bologna Academy of Sciences offers a prize of £40 for the best system of preventing or extinguishing fires by chemical, physical, or mechanical means. The competition is open to the World. Essays must reach the Secretary of the Academy not later than the end of May, 1896. They may be written in Latin, French, or Italian, but any other language is permitted, provided it is accompanied by an Italian translation.

LOVERS of illustration are beginning to protest against the ousting of the artist by the camera, and Sir Frank Lockwood did well to draw attention to the state of the young draughtsman walking from illustrated paper to illustrated paper with a portfolio of clever drawings under his arm. It is idle to deny that the camera may produce true works of art, and we are all quite willing to see it play its part in the illustrated journals of the day. But when it threatens the work of the pen and pencil, then reasonable warfare should be declared. The hand-camera will soon be a public nuisance. In France—where the mania for "snapping" everything and everybody is even keener than here—legislation is already on foot against it.

THE treasure-houses of Japan have hitherto been the Buddhist temples, for there has existed a close connection between that faith and the intellectual and æsthetic development

of the nation, a connection which does not exist in the case of the Shinto cult. No temple was without its examples, and the best works of Japan's finest artists and craftsmen were given as offerings either to the priesthood or to the shrine. At the close of the feudal period the temples lost the great endowments of land they had received in earlier times, and were thus deprived of a considerable source of revenue. This loss, to some extent, they made up by the sale of objects given by "pious founders," and it is thought that the priests have not always been careful to distinguish between those given to their fraternity and those intended as heirlooms of the shrine. To counteract this diminution of the national treasures, the Government decided to have a descriptive catalogue of them compiled by experts. This was not a very effective measure, for it was still possible to replace one object by another of inferior value, and to substitute a clever but worthless forgery for an original; and, apart from this, it is clear that many difficulties of identification must almost necessarily arise from time to time. The treasures of art are now to be gathered into the museums of Kyoto and Nara, and made available for the examination of students and for the inspection of the public. As there are 193,242 shrines and 72,154 temples, they must possess in the aggregate a very large amount of artistic material suitable for display in national museums of the kind now contemplated.

THE "Governor's Guide to Windsor Castle" is out. It is not cast in the mould of the ordinary guide-book, but is rather a popular little work on Windsor Castle. In other words, it is meant as much for the man who may never see Windsor Castle as for he who goes there with the guide in his hand. In so far that it deals with the visits of great notabilities like Louis Napoleon or the Tsar Alexander to Windsor, the volume has a personal note. It gives some sixty pictures and plans of Windsor. The "Governor," it may be remembered, is the Marquis of Lorne.

THE request, relative to the woodman sparing the tree will have to be adjusted a little, seeing that electricity is pushing its

another advantage. The charring of the surface of division increases the value of the timber by preventing decay. Eight trees may be felled by electricity while one is being brought down by axe and saw. So much for the good old woodman! The new force sweeps all before it.

BRAZILIANS are not satisfied with their present capital, Rio de Janeiro, which is not central, not very healthy, and perhaps not roomy enough. They are about to build themselves a brand new capital, embodying, as the projectors would say, every modern improvement. This was announced to the French Academy of Sciences by one of its members, M. Faye, who had just received a communication anent the new capital from Senhor Cruls, who appends to his name the substantial title of President of the Brazilian Committee of Preliminary Investigation for the Removal of the Capital of Brazil to the Centre of the States of the Confederation. Senhor Cruls states that the new federal capital will be built on the central plateau of Brazil, in a rectangle of about 25 miles long and seven broad—quite a city of magnificent distances, equal to anything in the United States. May not all this be permissibly described as a Capital suggestion?

WHILE New York has been trying to solve the problem of rapid transit within its borders by elevated railroads, and cable cars already in existence, and underground railroads, which so far are only projected, Brooklyn seems to have solved its problem by the introduction of the trolley system of electric cars, but the loss of life which has resulted so far has been something frightful to contemplate. The 105th victim killed in the streets of Brooklyn since the trolley system commenced its deadly work not more than two years ago, is recorded, to say nothing of the maimed and wounded, although it is only just to say that the number of maimed and wounded does not largely exceed the number of those who are killed outright. The accidents are usually quite fatal. In fact, the cars are constructed with trap doors in the bottom, so that the remains of a victim can be gathered up without resorting to the necessity of throwing the car off the track.



BUNGALOW COMPETITION.—WEST ELEVATION OF SECOND PREMIATED DESIGN.

way as a forest-feller. It is stated that on several estates trees have been felled by means of a platinum wire, stretched between two poles and used as a saw, heated to whiteness by electricity. The work is cleaner, and accomplished more quickly than by the old-fashioned method. The waste of sawdust is done away with. And there is

When one considers the fact that sometimes these cars are run at as high a rate as twenty miles an hour along the streets of some of the most populous districts of Brooklyn, the only wonder is that the deaths have not been more numerous than they have. The indignation against the trolley lines in Brooklyn has become so great that determined efforts

are being made to limit the rate of speed to something which will give a reasonable assurance of safety to the public.

A MOST prominent instance of a good property going begging was seen when Lord Dartmouth's residence, 55, Manchester Square, was recently put up at the London Auction Mart. Lord Dartmouth was chief Whip to the Conservative Party under the late Government, and is better known as Lord Lewisham. His residence, as was the case when it was previously offered twelve months ago, failed to elicit a bid. This is surprising considering the ridiculous price at which his lordship was prepared to sell. The house was occupied by Lord Dartmouth until his accession to the Peerage two or three years ago. It is mainly remarkable for its large square halls, with fine old mahogany staircase, and handsome reception rooms. It also contains a billiard-room, and was but recently modernised and decorated, under the direction of Professor Roger Smith, at a cost of £7,000. Not many years ago the lease—which at a ground rent of £60 per annum, has an unexpired term of 26 years—cost £8,000. Half that amount, however, it was announced, would now well satisfy Lord Dartmouth, notwithstanding the fact that in the course of last year he had refused offers of £3,800 and £4,000. Still there was no bid.

PLANS have been prepared by Mr. J. E. Leak, Architect, of Hunslet, for a block of new almshouses to be built through the generosity of the late Mr. Scott, of Hunslet, who left the sum of £10,000 to provide almshouses for ten poor people of the parish; one-half was to be spent in purchasing a site (which has been secured) and on the buildings, and the other half devoted to an endowment. The buildings will be of a substantial nature and in the Classic style.

THE Commissioners appointed to superintend the erection of the new public baths and wash-houses for the parish of St. Saviour, Southwark, may be congratulated upon very excellent results. The Commissioners appear to have seen that everything was substantially constructed. The first-class swimming bath, which has a water surface 100 ft. long by 30 ft. wide and a depth of 3½ ft. at the shallow end increasing to 6½ ft. at the deep, seemed to be one of the brightest and cleanest on the Surrey side of the Thames. The total cost, including £10,000 for the purchase of the freehold site, has been £40,000.

THE death, at the great age of 93, of Mr. Robert Fitch, the well-known archæologist and antiquarian, is recorded. Mr. Fitch was probably the oldest magistrate in the country. He was the author of a widely read book on "The Gates of Norwich," of which city he was at one time Sheriff. Formerly he possessed what was considered to be the finest private collection of antiquities in the kingdom. This collection he presented some years ago to the town of Norwich, and it is now located in what is known as the "Fitch" room at the Norwich Museum.

BELIEFS so general that they have become to be accepted as scientific facts, are often shattered by experiment. It has been considered as beyond question that iron becomes more brittle from the effect of cold, and that the dangers of railway travelling from the breakage of axles or rails are increased in frosty weather. Professor Dewar has communicated to the Royal Institution the result of a series of experiments proving indisputably that, so far from this being the case, the effect is precisely the opposite. The experiments were made with wires 2 in. long

and a tenth of an inch in diameter. The only exceptions were zinc, bismuth, and antimony, in all of which the tenacity was diminished instead of increased by the intense cold. These experiments prove the absolute fallacy of the popular belief, and show that the risk of accident is considerably diminished by the influence of excessive cold.

As the result of opening a stone-yard to all comers during the past winter, the Metropolitan Union of St. Olave has paid £7 a ton for the breaking of 2,500 tons of stone. Of course knack is required in this work, as in all other, and men unaccus-



BUNGALOW COMPETITION.—EAST ELEVATION OF SECOND PREMIATED DESIGN.

tomed to it do but poorly. But, allowing for this, and for the effect of paying those London men a weekly "living wage" instead of what they could earn on piece, it does seem that the Guardians of St. Olave's Union were entitled to grumble. It is computed that their pampered out-of-works—"Socialists," every man of them, no doubt—worked between 20 and 30 times less effectively than old men do along the highroads.

THE opportunity for comparing pictures by English masters with those of painters of the Continental schools is amply furnished in the forty-second exhibition of the French Gallery in Pall Mall. Works by Corot, Jacque, and Troyon, Lhermitte, Van Marcke, Heffner, Scheffer, and Heilbuth are to be found side by side with those by Constable, Morland, Gainsborough, Crome, Turner, Linnell, and Wilson. Nearly the whole of one wall is devoted to a dozen or more examples of a young artist, W. B. Tholen, who, if little is known of him in this country, has been the recipient of medals and honorary awards from many of the art societies of France, Belgium, Germany, and elsewhere. The gem of the collection in the way of landscape is, however, undoubtedly Turner's "St. Mark's Place, Venice," which came from the Novar, and afterwards passed into the Kirkman Hodgson collection.

THE last of a long line of "Millers of the Dee" recently died, and the Chester Town Council has resolved unanimously to purchase the historical Mills for £7,000, the object being to secure possession of the weir at the mills to improve the boating and navigation, and to prevent the flow of sewage up the river on the tides. It was stated that the grant of these Mills, with the fishing, was originally made by Edward VI.

WE are threatened with the extinction of the Seven Dials. At the meeting of the Board of Works for the district, it was proposed that application be made to the London County Council for an order incorporating Great St. Andrew Street and Little St. Andrew Street under the name of St. Andrew's Circus, St. Giles. The Post Office authorities, it was stated, were favourable to the suggested alteration, as no little inconvenience and confusion resulted from such a multiplicity of streets and thoroughfares of the same name in the Metropolis. Not only mistakes were made, but delays occurred in the delivery of important business letters

from the similarity of street nomenclature. The Seven Dials for centuries bore an evil reputation, although according to Evelyn it was originally laid out in the reign of the second Charles for wealthy and aristocratic tenants, and was mentioned by the poet Gay as

That famed and ancient spot,
Where to seven streets seven dials count their day,
And from each other catch the circling ray.

Its glory has, however, long departed, and recently it has acquired unenviable reputation and notoriety as the headquarters of a band of young thieves known as the "Hooked or Crooked Stick Brigade." After some discussion, it was agreed to refer the subject, with the memorials of the inhabitants of the Seven Dials and St. Andrew Street, to the Works Committee.

So the Roman villa recently unearthed at the pretty little village of Darenth, in Kent, is attracting a large number of visitors. Many of these, no doubt, are impelled by pure curiosity, but the majority give the impression of being learned in antiquarian lore. It may interest architects to know that the nearest station is Farningham Road, on the London, Chatham, and Dover Railway, about twenty minutes from the discovered ruins—quite an agreeable little walk.

SIR FREDERIC LEIGHTON, Bart., P.R.A., has, in obedience to the orders of his medical adviser, left England for two months. It is requested that during his absence all letters on business matters be addressed to the Secretary of the Royal Academy of Arts, Piccadilly, W.

A NEW Chancel has been lately added to St. Thomas's Church, Seaford, which was built in 1815 by the late Sir John Gladstone, and in which Mr. W. E. Gladstone, the present patron, worshipped as a boy.

ARCHITECTURE AND THE EISTEDDFOD.

STUDENTS should know that next year's Welsh Eisteddfod will offer prizes for architectural designs, sculpture, and carving. We append particulars;

ARCHITECTURE.—Set of Measured Drawings of an Old Building, drawn to $\frac{1}{4}$ scale with selection of full-sized mouldings, prize £5 5s. Design of an Elementary Public School, suitable for 400 scholars, the cost not to exceed £12 per head, drawn to $\frac{1}{4}$ scale, perspective optional, £10 10s. Set of Plans of one or more, of a Row of Workmen's Cottages, which could be let at 4s. per week, drawn to $\frac{1}{4}$ scale, £6 6s. Set of Plans of Farm Buildings, suitable for a mixed farm of 60 to 80 acres, drawn $\frac{1}{4}$ scale, £10. (Open to architectural students and assistants under 25 years of age.)

SCULPTURE AND CARVING.—Modelling in Clay of a Head, from life, to be executed in the presence of the adjudicators in two hours; prize, £3 3s. Panel in Clay, size 3 ft. by 2 ft., the subject to be emblematical of the National Eisteddfod, either figures or coat of arms; prize £2 2s. Carved Chimney-piece in hardwood (open to amateurs only), £3 3s. Carved Case in oak of a Grandfather's Clock; prize, £5.

SMITHS.—Wrought-iron Gate, 4 ft., for hanging on stone pillar, and suitable for villa, not to exceed in cost £5; prize, £3. Length (about 6 ft.) of Wrought-iron Railing 2 ft. 6 in. high, not to exceed in cost 17s. 6d. per yard; prize, £2.

VENETIAN MOSAIC WORK.

THE British Consul at Venice has just sent home a very interesting report on the lately revived art of working in mosaic as practised at Venice, which we learn therefrom is now employed chiefly in the internal and external astistic decoration of private and public buildings there, and which is now carried on uninterruptedly on a large scale and with great success there. A mosaic is a work formed by the use of "tesserae," or small cubes of enamel, marble, or other material, and of a gold and silver leaf between two films of the purest glass of various colours, which are skilfully fixed on cement so as to produce the effect of a picture. The composition of human figures in different attitudes, animals, draperies, or other objects requiring a careful delineation, are entrusted to the best workmen, and the execution of the back-ground to less trained workmen. The splendid mosaics which are made at Venice continue to be in great demand in the artistic markets of the world, for the skilful manner in which the tesserae are arranged, for their extreme beauty and delicacy of colour, the rich harmony of effect, and from their being nearly indestructible. The manner in which mosaics are now made for decorative purposes is quite different from the elaborate system used by the ancients, which consisted in fixing the tesserae one by one on the cement previously applied on the wall. The modern method of the Venetian school consists in executing the mosaic in the workshop, by having the tesserae fixed with common paste on the section of the cartoon assigned to each workman. When all the parts of the mosaic are complete, they are put together on the floor, or on a special wooden frame. The mosaic, which is then a perfect representation of the original cartoon, is again divided into sections on the reverse side, marked with a progressive number, and carefully packed to be sent off to the place for which it is intended. The surface of the wall where the mosaic is to be fixed is then covered with cement, into which the sections of the mosaic are uniformly pressed, according to their numbers and the key plan supplied to the fixers. When the cement has hardened, the paper on which the tesserae have been pasted is gently taken off, and the faithful copy of the original cartoon is again exhibited on the right side.

The Builders' Journal.

MEN WHO BUILD.

No. 10.

MR. COLE A. ADAMS.

WHAT I have done and been able to do, lies more in the past than in the present."

You had sent a message to Mr. Adams, and his reply contained this sentence. He was not desirous of posing as a celebrity. He had evidently mistaken your request. He was a better man than he deemed himself to be.

A very dreary thoroughfare is Victoria street, Westminster. It possesses but one single specimen of architectural merit; the rest is a conglomeration of debased design and fiendish taste. The air in the street always seems moist and cool, as if the sun were ashamed to look at it. A story runs that behind one of the hoardings thistles and nettles have flourished for twenty years. They are not lonely. There are thistles and nettles of architectural art all round, and the nearer you approach them the more they sting. The road is wide—its only virtue—and George Augustus Sala still hangs his banners on the outer walls, what time that flowers are plentiful, and the trailing blooms are strong enough to stand the treatment of a London summer. Sala seems quite alone in his attempt to add a speck of colour to the most colourless street in the Metropolis; and, although your tastes and his do not fit over matters architectural, he is worthy of respect for many of his archæological loves and hatreds. In this street, at Princes Mansions, constructed of terra cotta of a particularly offensive colour, Mr. Cole A. Adams finds peace, the while he overlooks the drill grounds of the London Scottish, and gets a peep, across the canyon—of the District Railway—at the Niagara Rotunda, devoted to the pleasures of a sixty thousand pound skating rink. His love for colour—the harmonies and grandeur of good colour—must be inborn, unless he brings it daily from his home in Sutton Court, for there are no influences, no subtle suggestions, no inspiring surroundings in Westminster. It is not so much as a colourist, or as an architect who may or may not have enjoyed a large practice, that you spend an hour with Mr. Adams, but to gather from

him, a thoughtful and experienced man, some of the conclusions he has arrived at upon architectural ethics. It must be more than ten years since he first occupied the chair of the Architectural Association, and his presidential address still remains the best that has ever been delivered. He has a peculiarly rich and resonant voice, given to but few of his fellow practitioners to possess, and there is a studied reasoning in all he says, and a tinge of unbelief as if he had weighed life in



the balance and found it wanting. In the old days he travelled a bit; no time, however, in Italy, the glorious land of colour; but he has made up a little for his loss by designing and executing with his own hands the decorations of his ceiling. Some day he will finish his work; it is always good to have something that wants doing in the future. His room possesses two fine old cabinets, of one of which he whispers to you that it has never been near Wardour street. It is really a beautiful old seventeenth century Dutchman, far finer than the specimen at South Kensington.

Mr. Adams, in speaking of the Architectural Association, remembers, so he tells you,



WOODCLIFFE HOUSE.—MR. COLE A. ADAMS, ARCHITECT.

the delightful year of office he had in Conduit street. His recollections of the Association of course go back farther than that, to the days, when self-help and mutual study were coupled with the "Design in beauty, build in truth," and when, so he thinks, it was the better for it. He himself had no finger in the "New Scheme" of 1882. He doubted its wisdom; and although it has shewn to have had no ill effects,—although men still come willingly to swell the ranks, yet he has a sneaking fondness for the days when each man helped the other, and a strong vein of good fellowship bound all together. Things change, says Cole A. Adams, and not always for the best.

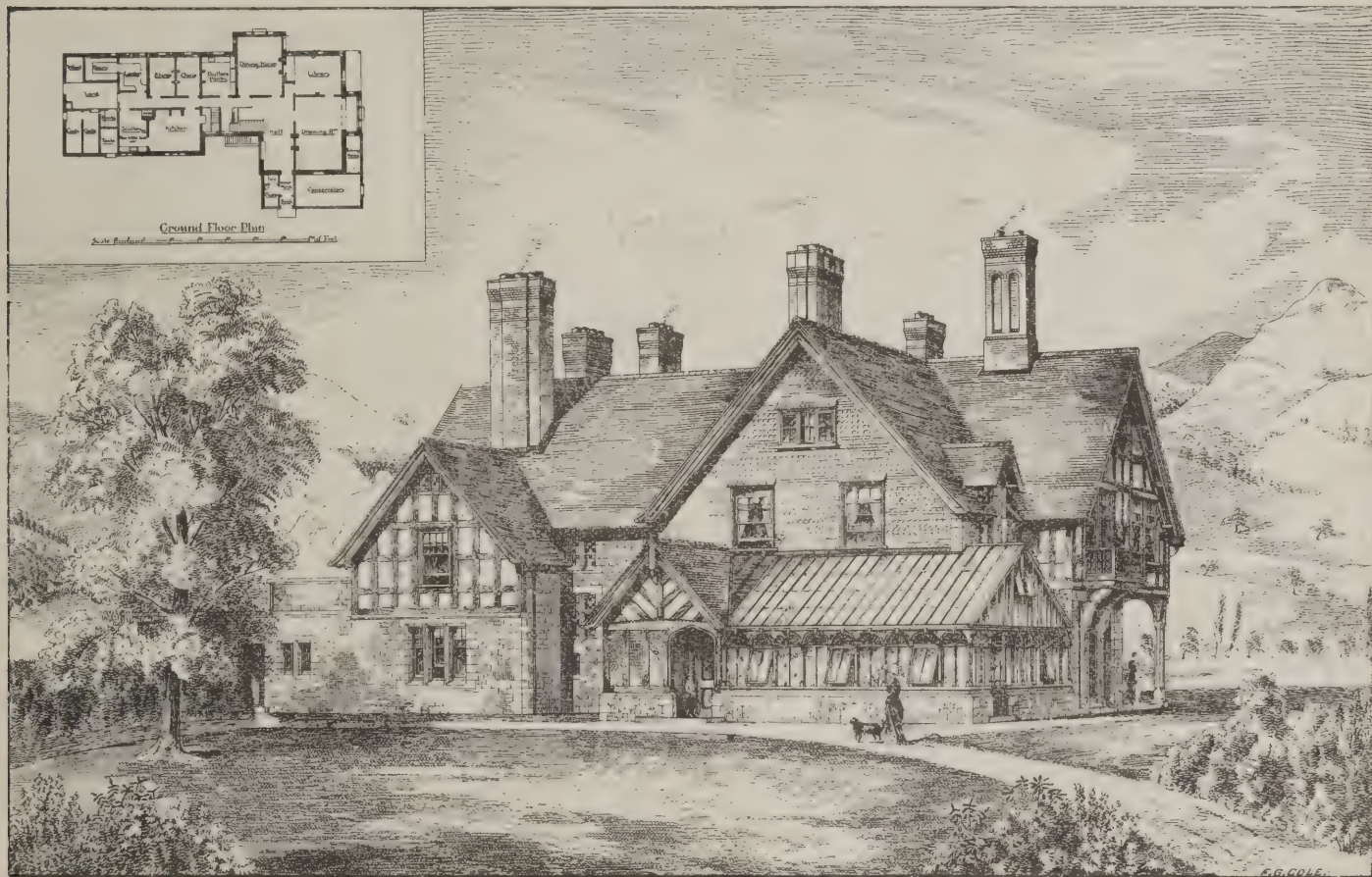
Mr. Adams was the first Member of the Council of the Institute to officially represent the Architectural Association. It happened in this way. The Committee of the Architectural Association being invited by the Institute to vote for one of the candidates at

cannot examine a barrister in the art of pleading, and is not *that* the one thing for which he studies? There were at least half a dozen other instances in which you could *not* examine, and every one of them went home to the uttermost point of conviction. But away for the time present with perplexing details of this broil. Mr. Adams can go back to his own student days with more relish, and seriously criticises the modern fashion of sketching. He vividly remembers returning from a fortnights sketching tour with many evidences of his labour. With glee he presented the drawings to his master and proudly awaited his praise. It came. The sketches were handed back, with this laconic judgment written in red ink in the corner, "How much prettier these would have been, covered with figures." Since then pretty sketches have had no place in Mr. Adams' heart. "Measure and sketch, sketch and measure," is what Fergusson

refrains from doing it is no matter of the World's, nor of yours; it merely demonstrates the love of peace that has filled him these many years; peace, which allows the swifter man to win the race for commissions, but leaves *him* satisfied with the self-satisfying conviction that what he has done he has done well, and what he has missed doing, would have been better done, had he himself done it.

AN ASSYRIAN PALACE.

A VISITOR was ushered in through the portal, guarded by the colossal lions or bulls of white alabaster. In the first hall he found himself surrounded by the sculptured records of the empire. Battles, sieges, triumphs, the exploits of the chase, the ceremonies of religion, were portrayed on the walls, sculptured in alabaster, and painted in gorgeous colours. Under each picture were engraved, in characters filled



A HOUSE, NEAR PRESTEIGNE: MR. COLE A. ADAMS, ARCHITECT.

the forthcoming election of its Council, Mr. Adams—then in the chair—replied that his Association, consisting of nearly a thousand men, should, in the opinion of himself and his Committee, have an official representative on the Council of the parent body. The suggestion was instantly accepted by the Institute, and the President himself was sent up to become the first representative. Since then the President of the Association is, practically speaking, an *ex officio* Councillor of the Institute. Talking of these things with Mr. Adams naturally leads one to the red rag of examinations, and once more you are thrown off the conviction that it is possible to determine the artistic capacity of a candidate by examining him. Mr. Adams believes that you can't. And he believes—in his belief—strongly and firmly, and brings many tantalising similes to prove it. You cannot examine a medical man, says Mr. Adams, in what I will call the delicate demeanour of the bedside, and is not that one of the "arts" of the physician? You

advocated, and that is the cry of this man of colour. For many years the colour class of the Architectural Association over which Mr. Cole A. Adams has presided has been one of the most successful held, and this, curiously, in face of the fact that more and more the architect is losing hold of colour, and calling in the services of the professional decorator. It is a pity, of course, but after all we are not a nation of colourists; and outside the natural colour of materials used in the internal construction of our homes we do little. Your chat with Mr. Adams—as interesting as it possibly could be—does not lead itself to the manufacture of copy; more surely does it build up that vast mass of conflicting evidence which goes to prove that all is not good architecture that looks it. Mr. Adams has devoted a fairly full life of toil to the faculty of getting to the bottom of things—of architectural things, and there is no man in the profession who could better throw light upon the dark spots of Architectural practice than he. That he

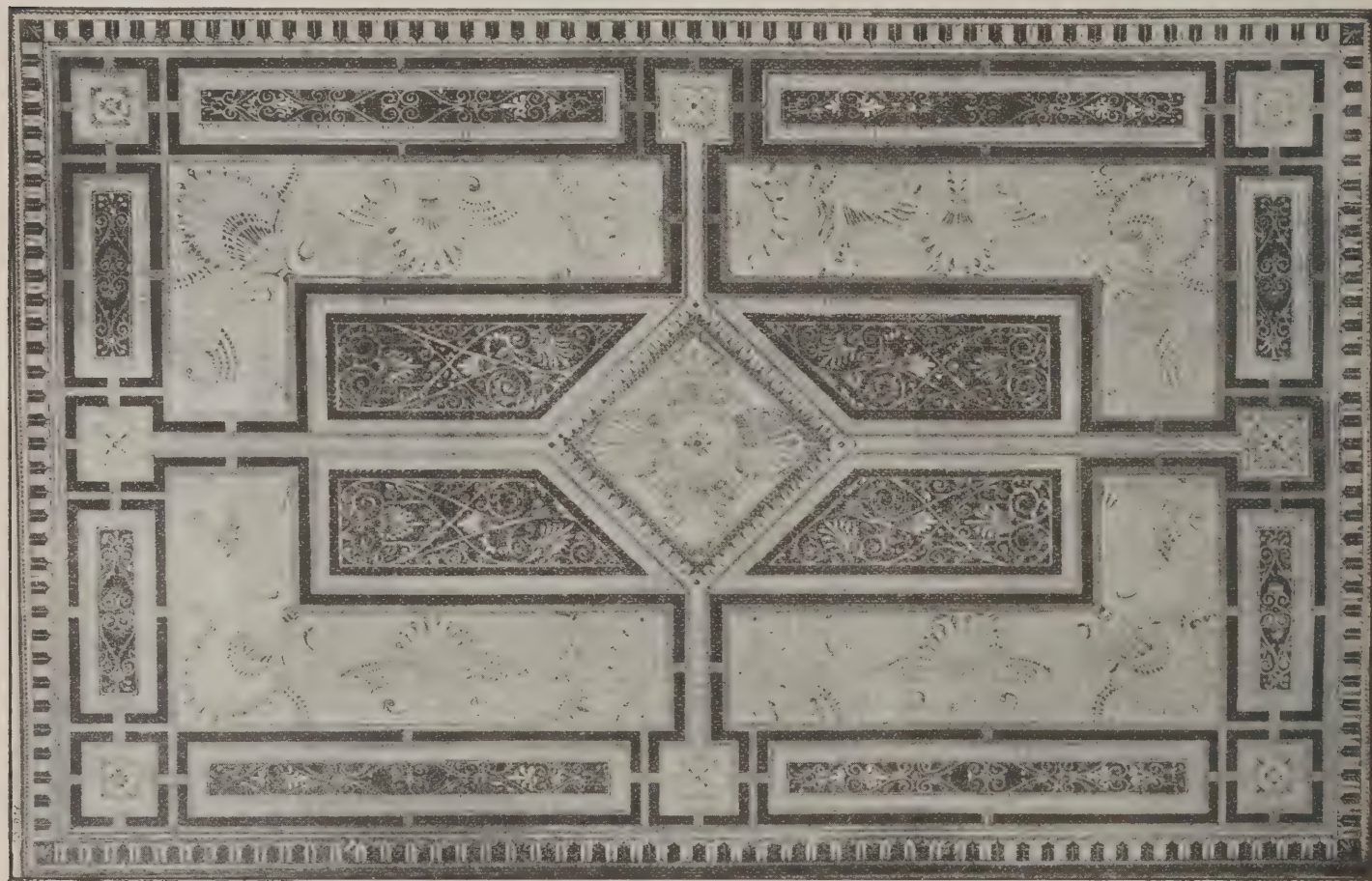
up with bright copper, inscriptions describing the scenes represented. Above the sculptures were painted other events—the king, attended by his eunuchs and warriors, receiving his prisoners, entering into alliance with other monarchs, or performing some sacred duty. These representations were enclosed in coloured borders of elaborate and elegant design. The emblematic tree, winged bulls and monstrous animals were conspicuous amongst the ornaments. At the upper end of the hall was the colossal figure of the king in adoration before the supreme deity, or receiving from his eunuch the holy cup. He was attended by warriors, bearing his arms, and by the priests or presiding divinities. His robes, and those of his followers, were adorned with groups of figures, animals and flowers, all painted with brilliant colours. The stranger trod upon alabaster slabs, each bearing an inscription recording the titles, genealogy, and achievements of the great king, and doorways, formed by gigantic winged lions, led away into other rooms.

THE LAST OF SOHO!

THE fame of Soho, Birmingham, has existed for more than a hundred years, but in a few months the great work will be lost or ever. The Soho House, where Matthew Boulton lived, with lavish courtesies to all the famous people of the last century, still remains as a School of Art. The old Soho Works, so well known, and so famous as "the toyshop of Europe," and the development of the vast houses of steam-power, the rare and graceful products of skill and fashion, for all parts of the World, the huge and busy workshops which were the "sights of Soho," and the admiration of all who saw them, secured for Soho unrivalled fame. Half a century ago the times and fashions had changed, and in 1850 the works were slowly dismantled, and scarcely a relic now remains. The "Old Pool" was drained in 1860 or 1861; the picturesque trees which surrounded the

which was developed and increased, partly by Matthew Boulton, and in later years by the genius and industry and skill of William Murdock in 1809, when solid cylinders were bored, special slide-valves invented, oscillating engines perfected, models of locomotives made, gas-lighting purified and perfected, and the area and powers of the foundry were marvellously improved. In 1850, when "Soho" was dismantled and broken up and sold, the coinage was removed to the foundry, and continued and extended with marvellous skill and success, especially in the bronze coinage, which has never needed alteration or correction, and which produced enormous quantities of the familiar coins. Matthew Boulton himself, not merely an able business man, but an able mechanic, designed all his presses and dies, and his work has remained unchanged and unchallenged down to our own times. Fortunately, although the old works are to

growth of nearly all the great industries of Soho. In many cases the details of wages, the costs of materials, estimates, &c., are preserved. The letters, not only of Boulton and Watt to each other, but those of Murdock, Creighton, Southern, and Buckle, the famous "Soho" men, almost innumerable letters from the most eminent scientific men of the past eighty to one hundred years, number, all told, about 15,000. All of these are full of interest, and have great historic value. Many of the minor inventions, as models, of Watt and Murdock, have been carefully preserved and endorsed; and rare engravings, the original letters patent, and daily records and incidents of scientific value, have happily been saved from loss. Most of these have been unseen and unknown, and might readily have been lost, but some years ago the manager (Mr. W. Henry Darlington) collected and arranged the mass of papers, drawings and relics, and



DESIGN FOR CEILING: BY MR. COLE A. ADAMS.

works were felled; the vast manufactory, which had been growing for nearly a hundred years, with the fine and handsome Soho House, was rapidly surrounded by the modern builder, and the eight various branches of industry—"Buttons in general, buckles and latches, silver and plated goods, medals and rolled metals, mint for Government coin, mercantile trade, ironfoundry and steam engines, and letter-copying machines," the pleasant views, and the keepers' cottages were doomed and lost for ever, leaving scarcely "a wrack behind." One portion of the works which had been added by Boulton in 1775 and completed in 1776 was, however, an important establishment, although at a considerable distance from "Soho." It was provided partly as a relief from the crowded workshops in the original building on Soho Hill, and over the Great Pool, and partly for the manufacture and finishing of heavy work and machinery, for boring, drilling, lathes, cylinders, and especially for foundry work,

be dismantled, there are some relics of great interest, and even of historic value. The machinery may be removed and disposed of, but the records remain. These include nearly all the books, drawings and plans which have been preserved for nearly a century and a half; the books of letters, wages and drawings have, happily, been preserved, and form an unrivalled mass of facts relating to the founding, development and growth of one of the largest and most interesting departments of a great and famous industrial enterprise for more than a hundred years. Excepting the Plantin Museum, at Antwerp, where a printing office of the sixteenth century has been preserved intact, with its presses and types, and where even stray "proofs" have been kept, there is probably no other record so extensive as the relics of the Soho Foundry to be found anywhere. The drawings and papers include the growth and progress of all kinds of work, the history of the steam-engine, the development of gas-lighting, the

placed them in a special room, where they were overhauled and preserved—a record-room which is unrivalled and which will be found to be not merely curious, but a unique summary of industrial history and of national progress.

THE competition for the District Council Buildings for New Hunstanton, Norfolk, has just been decided, the plans of Messrs. George J. & F. W. Skipper, architects, of Norwich, being unanimously selected. Four other architects (all of London) were invited to submit plans. The amount to be expended is £2,000.

SOME concern is felt as to the scheme initiated for the building of a Church to take the place of St. John's, at Buxton, inasmuch as it has been found that the foundations of the edifice now standing are solid and all right, but elsewhere is understood to be not solid. Sir Arthur Blomfield, who has had the matter placed in his hands, has tested the earth about the site, and we understand that no solid foundation can be found, although a depth of 27 feet has been tested.

A MODEL TECHNICAL SCHOOL.

BIRMINGHAM'S NEW BUILDING APPROACHING COMPLETION.

THE well-equipped Technical School for Birmingham, the erection of which was commenced about eighteen months ago, is now rapidly approaching completion, and there is reason to believe that by the time the winter session is opened in October next the teachers and students will be in possession of their new home. As a building it will be one of the most impressive edifices in Birmingham. It is very prominently situated, and there is no local building of modern construction to compare with it in its general aspect, for it possesses the distinction of being the only public building in Birmingham, with the exception of the Town Hall, which can boast of three elevations. The total area of land occupied by the school is about 3,000 yards, and the building is four storeys in height from the ground floor. The frontage to Suffolk street measures 120 ft., and the frontage to Summer street is 130 ft., the depth between the two streets being 208 ft. The principal elevation faces the former street, and the building will be surmounted by a central turret, which is in process of construction, and will terminate with a large weather-vane. The style of architecture adopted is that of the English

also contain allegorical groups of figures. The entrance is flanked on either side by a pair of enriched columns with an entablature bearing the words, in terra-cotta, "Technical School," worked between the triglyphs in the frieze. From the entrance hall a bold flight of steps, 16 ft. wide, leads to the staircase hall on the ground-floor level. The assembly or examination room is a spacious apartment, 45 ft. wide, 70 ft. long, and 20 ft. high, which is lighted from one side by four large mullioned windows, and will be enriched by an ornate terra-cotta dado, 14 ft. high, arched, and richly moulded. Above this will be a frieze 5 ft. high, which will probably be decorated at some future time with a procession of the trades of Birmingham. The ceiling is to be panelled in squares and richly moulded. Next to the examination hall is a commodious library, 45 ft. by 40 ft. On every floor there are two spacious corridors communicating with the staircases, so that every facility is provided the students for obtaining access to any particular room in the building. The staircases are arched and moulded in terra-cotta, and the corridors are lined with brown glazed bricks and terra-cotta, the windows being finished in terra-cotta outside and inside. On the first floor is the physics department, with a large lecture-room adjoining, the

and a small lecture-room. The iron and steel shop is 56 ft. wide by 45 ft. long; and on the opposite side of the basement is the brass shop (80 ft. long and 20 ft. wide), the pattern makers' shop, and the metal-plate and plumbing shop. Outside the main building, but in the school-yard, is a two-storey building, the floor at the basement level being set apart for the accommodation of the metallurgical plant, the accumulators in connection with the electric lighting, and a smithy. Below this, in the sub-basement, is the engine-room (40 ft. wide by 36 ft. long), which contains the gas-engines for supplying the motive power to the school and driving the electric-light plant, adjoining this room being the apartment containing the heating apparatus, the foundry, and rooms for teaching die-sinking and stamping. In the construction of the school everything that is possible has been accomplished for the comfort, convenience, and safety of the students, and under the supervision of the architects, Messrs. Essex, Nicol & Goodman, every effort will be made to make the institution a model of what a great technical training school should be. The total cost of the building, furnishing and fitting up of the school, will be about £70,000.

THE wooden Bridge over the river between Waterloo Place and Grant Street, Inverness,



BUNGALOW COMPETITION: A PERSPECTIVE SKETCH BY "VIOLET."

Renaissance, with bold gables and mullioned windows, the arches being elliptical in preference to semi-circular or pointed. To relieve the elevation it is well buttressed, a practical advantage which is enhanced by the fact that it has given the architects an opportunity of securing windows very much larger than they otherwise would have been. The building is erected of red brick, with buff terra-cotta mullions and dressings to the windows and the cornices, the terra-cotta being in all cases taken through the walls. The principal entrance is in Suffolk street, the elliptical arch being boldly moulded and richly ornamented in terra-cotta. The four swing-doors are approached by six steps, and open into a spacious hall, 28 ft. wide, 16 ft. long, and 28 ft. high, the walls being lined with terra-cotta. Beneath the arch at the entrance are three panels of terra-cotta sculpture, descriptive of various subjects taught in the school. The centre panel represents an ancient school of alchemists, with a background of Grecian pillars, the students being grouped around the teacher. On one side of this panel is a modelled group of figures representing chemistry, astronomy, and physics, and on the other side a group illustrative of the iron and steel industries. The spandrels

chemistry lecture-room, and the electrical engineering and telegraphic laboratories, the dynamo-room, and an apartment for applied physics. The second floor is principally set apart for the women's department, but it also contains class rooms for botany, geology, and chemistry, and sanitary museums. On the third floor is situated the chemical laboratory, the main room, the largest in the building, being 100 feet long by 56 feet wide. This room is lighted almost entirely from a glass-roof, which is carried upon open lattice girders and iron trusses. On the fourth floor well-lighted rooms have been erected for the study of building construction and geometry. Returning to the entrance hall, there are still two floors to be inspected. The first is called the lower ground floor. On this floor is the metallurgical laboratory, which is scarcely of less size than the large chemistry laboratory, being 100 ft. long by 45 ft. wide. Near it is the electro metallurgical and bronzing laboratory, 56 ft. by 30 ft., as well as several small lecture-rooms, &c. Adjoining Summer street are lecture-rooms, the metallurgical museum, and the carpenters' shop. The basement contains the metallurgical lecture-room and preparation-room, the mechanical laboratory,

will soon be a thing of the past. The Rose Street Foundry Company are the contractors for the erection of the new Bridge. Designed by Mr. J. A. Mackenzie, the Burgh Surveyor, the new Grant Street Bridge will be a handsome structure. It will stand upon four pairs of piers formed of cement, bound and encased in metal cylinders. These cylinders are 7 ft. in diameter, and will go down about 14 ft. into the bed of the river. There will be a massive stone abutment at either end, and these and the pilasters surmounting the piers will be capped with lamps. The span of the lattice girders is about 70 ft., and the entire length of the structure is 350 ft. The carriageway of the Bridge will be 18 ft. wide, and there will be a footpath 5 ft. wide on each side of the carriage way.

A MOVEMENT is on foot for the bridging of Lough Corrib, county Galway, at a point where it converges to a narrow isthmus of about a quarter of a mile across. The coastline of the lake is seventy miles long, and the people at one side of the narrow isthmus have to make half the circuit of the lake with all but the very lightest kind of traffic. The movement has the support of practically every one in the district concerned.

ANCIENT ART OF PREPARING PAINTS.

IT is matter for regret that the subjects of the works of the great masters have been entirely lost, as also are many of the secrets of colouring with which they were possessed. The description by Sir Humphrey Davy of his explorations among the baths of Titus, at Damascus, the decorations of which were of a most magnificent character, gives us some idea of the accustomed voluptuousness of the time. These decorations were only to be seen by torchlight, and are worthy of note. They are still regarded by connoisseurs as performances of great excellence, and the minor ornaments have given rise to that style of painting which ought rather to be called Romanesque than Arabesque. That there is a lost art in preparing paint is undoubtedly true, for none of the beautiful painting—or rather colouring—of the Vatican can at the present day be equalled. Sir Humphrey Davy found, in the baths of Titus and the ruins of those others known as the baths of Libya, a large earthen vase filled with mixtures of different colours. This was in the year that the celebrated chamber was opened in the baths of Titus, that caused such a stir throughout civilised Europe, viz., 1813. There were, in the vase referred to, three different shades of red—one of a bright, approaching to orange colour, another a dull red, and the third a purplish red, nearly of the same tint as prussiate of copper. On exposing the bright red to the flame of alcohol it became a darker red, and on increasing the heat by means of the blow pipe it fused into a mass very much like litharge, and which was really demonstrated to be this substance by the action of sulphuric and muriatic acids, proving that it is minium and red oxide of lead. On exposing the dull red to heat, it became black, but on cooling recovered its natural tint. When subjected to heat in a glass tube, it afforded no volatile matter. Acted on by muriatic acid, it rendered it yellow, and the acid when heated upon it yielded an orange-coloured precipitate to ammonia. The colour, when fused with hydrate of potash, rendered it yellow, and the mixture acted upon by nitric acid, afforded silica and orange oxide of iron. It is very evident from these results that the dull red colour was an iron ochre. The purplish red mixture, when subjected to experiments, exhibited very similar phenomena, and proved to be an ochre of a different tint. In his report to the Royal Society, in 1815, on these ancient painting mixtures, Sir Humphrey Davy said: "I found another red in the walls, of a different tint from those in the vase, and much brighter, which had been used in various apartments and formed the basis of the colouring of the niche and other parts of the chamber in which the Laocoon is said to have been found. On scraping a little of this from the wall it was found by chemical tests to be vermilion or cinnabar, and in heating it with iron filings running quicksilver was obtained from it. The above particulars of a matter of the far distant past may prove useful, and those modern decorators who like to know what they are working with, and who are chemically inclined, may possibly pursue the subject still further."

FOURTEENTH CENTURY GOTHIC.

THE fourteenth century was the glorious age of Church Architecture. It was the climax beyond which Christian art was never carried. Though all that riches, piety, and talents could effect was done to sustain its consummate excellence, it followed the universal law, and, having once reached perfection, began gradually to decline. We have some difficulty in forming an accurate idea of the extreme architectural and decora-

tive magnificence which prevailed at this period. It may, however, be fearlessly asserted that not only were the Abbey and the Cathedral of gorgeous beauty and wealth incalculable, but every Parish Church was proportionately adorned. Let us take the Lady Chapel at Ely. Examine any one of its hundred canopied sedilia. Look at the exquisite mouldings and panelings of the projected Purbeck shafts and buttresses below; then admire the minute images, the crisp bunches of hollow foliage, carved like ivory balls with almost microscopic nicety. Lastly, see the thick flakes of gold which overlay them, and the bright varied colouring which may yet be traced under the coats of modern whitewash. Then view the spangled vault, once glowing with stars and golden bosses; the windows, which were filled with the richest stained glass, as their scanty and obliterate fragments still attest. Observe the countless compartments of tracery within tracery, and canopy above canopy, which climb even to the ceiling. The remains of ancient workmanship which have not been hewn away by the axe and the chisel should also be minutely observed. Or imagine Lincoln or Westminster in its glory. There are many parts of these, and indeed of every cathedral, where a single square yard of sculptured detail exhibits the labour of months, while a niche or a canopy or a moulded base must have been the task of many a long toilsome week. The aggregate cost of any one such building would now be almost incredible. Take the first of that long series of high tombs, with its panelings, its canopies, its effigies; the jewelled mitre and ring, the painted orphery, the gilded crocket; look up under the dark canopy, there is gold and colour and intrinsic glistening, though man's eye was never likely to behold it. The pavement was once of coloured tiles or mosaics, in which a hundred latent effigies and crosses shone resplendent. You may still see the marble slabs reft of their metal, the boss faint with its faded gold, the canopy deprived of its silver saint, the window without its ancient hues. Go again to the Village Church. In the time of the Edwards alone, thousands of these were built throughout the land. It is certain, and may be proved by actual examination in numberless instances, that even these, however remote, generally possessed the most exquisite decoration.

THE Sanitary Committee has decided to recommend to the Coventry City Council that additional accommodation for small pox cases be provided on land belonging to the Corporation at Pinley. The total estimated cost is £5,227, exclusive of roads, fencing, heating, architects' commission, clerk of works, and incidental expenses.

THE Admiralty intend to extend and improve Devonport Naval Ordnance Depot to provide accommodation for nearly double the number of men now employed. It is intended to spend on the extension during the next twelve months over £8,000. The existing police quarters are to be altered and extended at a cost of £3,000, and the water supply is to be improved at an expenditure of £3,000.

THE strike of Douglas house painters has collapsed. The men had been out for exactly five weeks. Their demand was that they should be paid at the rate of 7d. per hour from the 1st March to 31st October, and at the rate of 6d. during the rest of the year, instead of at the rate of 6d. per hour the year round. They have now gone in at the old rate, with the exception of a few men who are jobbing on their own account.

EXTENSIVE alterations are to be carried out to the Voluntary Schools at Hasland, to meet the need of additional accommodation. It is hoped to raise the money by subscription.

THE sum of £7,000 has been given by the executors of the late Mrs. Baker, towards the building of the new Bridgnorth and South Shropshire Infirmary.

SOCIETY MEETINGS.

Sheffield Society of Architects and Surveyors.—The annual general meeting of the members of this Society was held at the School of Art, Arundel Street, on Tuesday last, the president, Mr. E. M. Gibbs, F.R.I.B.A., in the chair. There were also present, Mr. C. Hadfield, F.R.I.B.A., Mr. F. Fowler, F.S.I., Mr. C. J. Innocent, F.S.I., F.R.I.B.A., Messrs. Thomas Winder, W. T. Campsall, J. T. Wheen, W. C. Fenton, J. R. Wigfull, A.R.I.B.A., W. J. Hall, J. Smith, E. Winder, jun., J. B. Mitchell-Withers, and many others. The report of the Council was read by the hon. sec., Mr. C. J. Innocent. It referred to the satisfactory condition of the Society, and said that the following members had been advanced from the Student to the Associate Class:—Messrs. Bromley, Campsall, Flockton, Hadfield, Innocent, Lancashire, Sampson, Woffenden, and the following had been received as new members:—Students: Messrs. Appleby, Chippling, Clayton, Dawson, Day, Ensor, Hemsall, Parkin, Robinson, Sandford, Gillham and Skill; Fellow: Mr. Bryden; and two Lay Members, Mr. B. Bagshawe and Mr. W. J. Gardner. Dr. H. C. Sorby had consented to become an honorary member. The report made reference to the work of the session, to alteration made in the rules, and to improvements made in the library. At the invitation of Mr. E. W. Mountford, the students visited the new Town Hall. The classes during the year had been well maintained, and the sketching class had visited numerous places in the neighbourhood. Mr. F. W. Chapman had secured the president's prize, and Mr. Y. C. A. Feather the Society's prize. In the designing class, Mr. Y. C. A. Feather had taken first, and Mr. Y. V. Woffenden the second prize. Mr. Charles Hadfield was elected President for the ensuing year.

Liverpool Geological Society.—The last meeting of the present session of the Liverpool Geological Society was held on the 9th instant, in the Royal Institution, Colquitt street, when the chair was occupied by Mr. T. Millard Reade. Mr. T. W. Davies read a paper entitled, "Description of the Strata exposed during the construction of the Seacombe branch of the Wirral Railway." A number of interesting geological specimens which had been found in the cutting at Seacombe and Poulton were exhibited, and it was stated that several of the specimens were exceedingly rare. The strata exposed was of great scientific interest to geologists.

Edinburgh Architectural Association.

—At the last meeting of this association, which was held in the Royal Institution, Mound, Mr. W. W. Robertson, the president, in the chair, Mr. John Kinross, A.R.S.A., made a communication on St. Andrew's Priory, in which he dealt, in the first instance, with the history of the buildings, and proceeded afterwards to describe in detail the excavations which Lord Bute had undertaken in connection with the ruins. In his opinion the evidence was amply sufficient to prove that the monastic buildings were commenced after the Cathedral building was completed. Mr. Thomas Bonnar read a communication on "Some Notes on the Ancient Mural Decorative Art in Scotland."

Leeds and Yorkshire Architectural Society.

—At the annual meeting of this society the following gentlemen were elected officers for the session 1895-96:—President, E. J. Dodgshun, F.R.I.B.A.; vice-presidents, W. Watson (Wakefield), W. Carby Hall, A.R.I.B.A.; hon. treasurer, William H. Thorp, F.R.I.B.A.; hon. librarian, W. H. Beevers, A.R.I.B.A.; hon. secretary, Francis W. Bedford, A.R.I.B.A.; members of Council, W. S. Braithwaite, H. B. Buckley, G. F. Danby, W. A. Hobson, Jas. Ledingham, F.R.I.B.A. (Bradford), W. C. Williams, F.R.I.B.A. (Halifax); auditors, H. S. Chorley, B.A., L. S. Dodgshun.

WHILE breaking down a mahogany log in a North London saw mill last week, the blade of a razor was found within three inches of the centre. It was broken in three pieces. The size of the log was 24 in. by 24 in.

SIR F. LOCKWOOD ON DRAWING.

ART V. THE CAMERA.

SIR FRANK LOCKWOOD, in opening the annual exhibition of drawings, held by the Royal Society of Great Britain and Ireland, remarked that no phase of the Society's work interested him more than that which promoted drawing from memory, for it was well that such drawings should be encouraged in these days. He had no great admiration for the camera or the kodak, and he looked with the gravest apprehension at the illustrated papers of to-day when he found that they were

A person unaccustomed to that found a little difficulty, but Mr. George Du Maurier had told him that in those days he drew with the greatest confidence upon it. An alteration could easily be made. Reproduction, however, was expensive, because the block had to be cut, but now they had the process system, which was adopted by the illustrated papers, and by which they reproduced with the most wonderful fidelity a drawing which might be made with pen and ink upon a sheet of paper. That should be a great encouragement to those who wished to develop drawing in black and white, for if they spoiled one piece of paper they could easily

named Blackmore, discovered a heap of coins, about a hundred in number, in a good state of preservation, though they are said to be about 1,000 years old. The man gave a quantity to his master and sold the others at prices ranging from 6d. each and upwards.

FROM a revised list it appears that there are now on the books of the Institution of Civil Engineers 6,737 members of all classes; there being seventeen honorary members (including five princes of the blood), 1,862 members, 3,687 associate members, 355 associates, and 816 students.

THE German Chapel Royal attached to Marlborough House is now undergoing extensive alterations, and is to be made similar to the Chapel Royal, St James's. The old pulpit, a heavy thing with a hood, has been removed, the altar rails advanced, and the old seats have been taken away. The organ, which is over the altar, is not at present to be moved.

IN view of the unusually large number of imposing town mansions that are just now in the market, the keen competition that resulted in the sale of the lease of No. 12, Charles-street, Mayfair, the residence of the Marquis of Ailsa, at Tokenhouse yard, has a special significance. The opening bid was 17,000*l.*, and it was not until 24,000*l.* had been offered that the valuable lot was deemed sold.

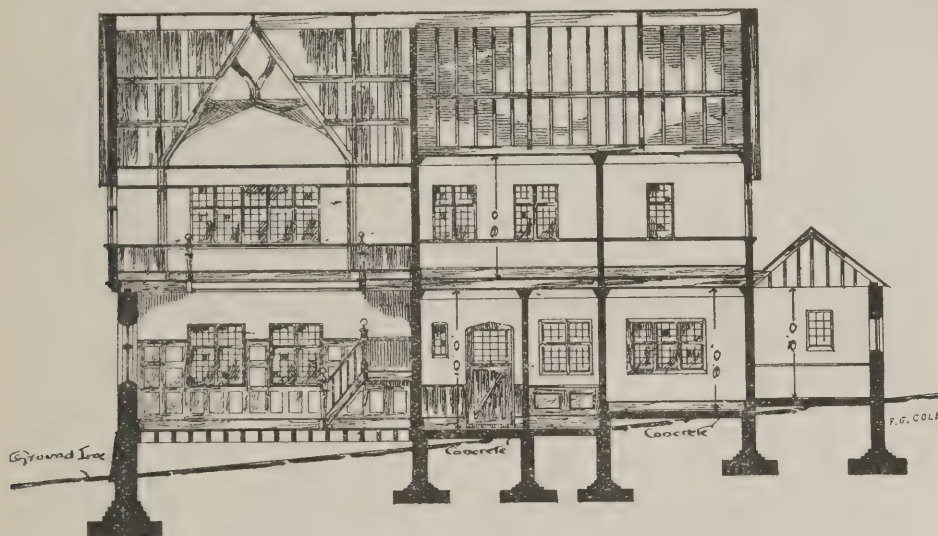
THE amount of gas annually made in England is 60,000,000,000 cubic feet. To produce this quantity 6,000,000 tons of coal are used.

At a recent meeting of the Council of the Royal Society of Painter-Etchers, the following Associates were elected Fellows of the Society: D. Q. Cameron, J. Finnie, Oliver Hall, J. Knight, R.I., and A. Legros.

A MISSION-ROOM formed out of two cottages, which has been used for eighteen years, in the Lower Easton district of Bristol, is about to be replaced by a new Wesley Hall, on which it is proposed to spend £1,400.

MR. ARTHUR S. COPE, the portrait painter, has been commissioned, by the Emperor of Germany, to paint a full-length portrait of his Majesty for presentation to the Queen. The Emperor is to be painted in his uniform as colonel of the Scots Greys.

THE date of the opening of the new water-works at Malvern, by her Royal Highness the Duchess of Teck, has been altered from the 22nd to Tuesday, the 23rd inst. Their Royal Highnesses will arrive at Madresfield Court on the Saturday.



BUNGALOW COMPETITION: CROSS SECTION BY "VIOLET."

nothing more than a bundle of indifferently-produced instantaneous photographs. He feared that great danger would result from this. Of course, the draughtsman, could not get as near the truth, perhaps, as the camera, but he was thankful to think in the cause of Art that there was always something which the artist could get that was far removed from the power of the camera. No doubt, there was little encouragement for art or art students. He should think it a dull day for a young fellow who walked down Fleet Street with a portfolio of drawings, full, perhaps, of ability and talent, which he took from one illustrated paper to another, only to find that the rival camera forestalled him wherever he went. Illustrated journals had multiplied enormously during the past few years, but, unfortunately, the avenues for the youthful artist had not been multiplied to the same extent, and he wished to take that opportunity of entering his protest as strongly as he could against the art of the country being driven out from amongst them by the camera. Turning to speak of drawing from memory, he should think it an immense advantage to a caricaturist. Nothing he should think would be more offensive to the person who was to be caricatured than to see an artist sitting down before him and exaggerating all those defects which the model would probably hide. But if the caricaturist had the gift of drawing from memory, he could make his drawing under circumstances which would in no way lead to his detection, and he could reproduce with satisfaction, if not to the object at least to the friends of the object, the result of his observation, and that result would give satisfaction to the friends of the object in proportion to the exaggeration of the defects of the person who had been drawn. They had one great black and white artist, Sir John Tenniel, who, for more than forty years, with courage, with pathos, with humour, and with no unkind or ungenerous line in his composition, had drawn our national history, all from memory. He thought that the Society did well in encouraging tastes that were artistic. He remembered the time when black and white work was produced practically in one way only for purposes of illustration. In those days a boxwood block would cost something like 7*s.* 6*d.*, and not everyone who could draw in black and white had 7*s.* 6*d.* in his pocket. Then they had to cover it with Chinese white to draw upon it.

get another, and take it to their publisher directly, without having to trust to the person who cut the block, a person considered sometimes by artists to be somewhat erratic, and they would have the certainty of obtaining the greatest facsimile of their work.

SAWDUST.

FOR the new Court House at Richmond, Surrey, the committee having considered the report of Mr. Edmeston, the consulting architect, have recommended the Council to award the first premium of £21 to the author



BUNGALOW COMPETITION: EAST ELEVATION BY "VIOLET."

of the design marked "Esperantia," and the premium of £10 10*s.* to the author of the design marked "Justice." The author of the design marked "Esperantia" was Mr. N. J. Ancell, the architect of the Town Hall, and "Justice" was Mr. Frank J. Brewer, of Richmond.

THE Devonshire County Council is making extensive alterations at the Asylum at Exminster. While engaged in excavating a workman

It is proposed to enlarge the Sunday school premises in connection with the Heelis-street Wesleyan Chapel, Barnsley, by the erection of new class rooms, at a cost of £300.

TENDERS will shortly be required for the erection of a drinking fountain at Sheffield, which it is proposed to place at the junction of the Sheffield and Doncaster Roads, as a memorial to the late Mr. F. W. T. V. Wentworth. The sum to be expended is £250.

ARCHITECTURAL IRONWORK: CONSTRUCTIVE AND DECORATIVE.

*A Series of Instructive Papers for the
Artist and Worker.*

CHAPTER VII.

GIRDERS—continued.

WE now come to the consideration of cast-iron arch girders, which, with wrought-iron tension bars, are very frequently employed for the support of front or back walls of brick edifices in this country, although they are adopted on a far more general scale in the United States, and they are really a very cheap and effective method of securing wide openings. The casting is made in one piece, with box ends, these latter having grooves and seats to receive the wrought-iron tie-rod. This tie-rod is made from $\frac{1}{2}$ inch to $\frac{3}{4}$ inch shorter than the casting, and has square ends, forming shoulders, so as to fit into the casting. The rod has usually one weld in its length, and the greatest care should be observed that this weld is perfect. The rod is expanded by heat, and then placed in position in the casting, and allowed to contract in cooling, thus tying the two ends of the casting together to form abutments to receive the horizontal thrust of the rod. These members require to be very carefully proportioned and constructed. The girder should have a rise of about 2 feet 6 inches on a length of 25 feet. One square inch of cross section of rod should be allowed for every ten net tons of load imposed upon the span of the arch. It may here be mentioned that a cubic foot of brickwork weighs one hundredweight, and a foot of brickwall, 16 inches in thickness, will weigh 150 pounds. It is sometimes supposed that iron members, whether in the form of pillars or beams, tend to render an edifice fire-proof, or partially so, but this may fairly be set down, as results have demonstrated from fires which have of late years taken place in the Metropolis and elsewhere, as a decided error. Unprotected iron, and especially cast-iron, will easily succumb to intense heat if it is continued for any length of time. Iron columns are generally cast plain, with plain caps and bases. More rarely, they are fluted to give them somewhat of an ornamental character, if exposed to public view, as previously mentioned.

The next division of the subject which comes up for consideration is that of wrought-iron beams and girders, which are often employed instead of cast-iron members, though it must be admitted that they are hardly so satisfactory, everything considered. Architectural members of the description under notice, when made of wrought-iron, are not actually hammered out on the anvil or by the steam hammer, but are in reality constructed of rolled malleable iron-plate of the proper section, secured together by rivetting. In these all calculations of strength will be largely dependent on the rivetting and bolting, and too much care cannot be devoted to these very and all important joints. The following items with regard to rivetted joints are essential to be borne in mind. In many instances these wrought-iron plate girders are secured together by placing angle irons at each corner, and then rivetting through the whole, especially when the girder has a double web. Girders of this description are made of a great variety of forms, of sections and combinations, according to the purposes for which they are required, and the loads which they will have to sustain. Obviously the strength of girders of this kind is largely dependent upon the rivets and rivetting. Wrought-iron girders are designated by a variety of names, according to the principle adopted in their construction, such as "plate," "lattice," "trellis," &c. The following figures give some particulars of a single web girder: Web, 20 inches by $\frac{1}{2}$ inch; top plate or flange, 10 inches by $\frac{3}{4}$ inch; top angles, 4 inches by 4 inches by $\frac{1}{16}$ inch; bottom angles, 3 $\frac{1}{2}$ inches by 3 $\frac{1}{2}$ inches by $\frac{3}{8}$ inch; length of 30 feet, say 2,600 lbs.

In treating now of rivetted joints, it may be mentioned that, according to Mr. Adams, "the nominal diameter of a rivet is the diameter before being heated. The hole is larger to allow of the heated and expanded rivet entering

without difficulty. The hole whether drilled or punched averages $\frac{1}{16}$ inch larger in diameter (at the junction of the plates) than the rivet, and the finished rivet of course fills the hole. The diameter of head averages 1.7 times that of the shank, with a thickness equal to $\frac{3}{4}$ of the shank. The total length of rivet shank to fill the hole and make the closing head is commonly made equal to the total thickness of plates passed through + $\frac{1}{16}$ inch for each joint, or $\frac{1}{32}$ inch for each plate + $1\frac{1}{2}$ times its diameter. For instance, a $\frac{3}{4}$ inch rivet would have a snap head $1\frac{1}{2}$ inches diameter and $\frac{9}{16}$ inch thick, with a rivet hole $\frac{5}{8}$ inch diameter, and passing through three $\frac{1}{2}$ inch plates would have a length from underside of head to point of $2\frac{3}{4}$ inches." On the same subject Professor Unwin states that "the tension in the rivet may be estimated at 21,000 lbs. per square inch of its section, and friction due to this would be about 7,000 lbs. per inch of rivet section." Experiments show a still greater friction, but if the tension in the rivet exceeds the elastic limit, its performance cannot be relied upon. English engineers entirely neglect the friction in estimating the strength of the joint, the reasons assigned being that the amount of tension in the rivet is not ascertainable, and that vibrations and other causes, tending to slightly elongate the rivet, may, in course of time, destroy it altogether.

Coming now to the lap and pitch of rivetted joints, the least should allow of a clear space of metal in each direction equal to the diameter of the rivet. Generally in girder work a joint with $\frac{3}{4}$ inch rivets will have a minimum of 3 inches pitch, with a distance of $1\frac{1}{2}$ inches from the centre of the rivet to the edge of the plate. The tenacity of iron plates is considered to be decreased by from 5 to 20 per cent. by punching, and to be increased by from 10 to 12 per cent. by drilling.

The average tenacity of joints is reckoned in pounds per square inch on net section in iron plates thus: Single rivetted drilled, 40,500; single rivetted punched, 35,400; double rivetted drilled, 43,700; and double rivetted punched, 39,000. The original tenacity of iron plates is 46,000 pounds per square inch. The shearing resistance of iron and steel bars averages $\frac{2}{3}$ ths of their tensile strength, but in the case of rivets the resistance is from various causes apparently less. The average resistance to single shear per square inch of section, is in iron rivets with punched holes, 46,000 pounds, and in iron rivets, with drilled holes, 43,000 pounds, so that a $\frac{3}{4}$ rivet in a punched hole in single shear would have an actual diameter of .8 inch, an area of .5 square inch, and a resistance of 23,000 pounds, which, at a factor of safety of $\frac{1}{4}$ th would give a safe load of 5,750 pounds or 2.567 tons. In speaking of the crushing action in hole, Professor Unwin states that "the value of the crushing stress, which produces injury to the tenacity, or shearing resistance of the joint, is very uncertain. In the case of steel joints there is no indication of injury with crushing pressures of 50 tons per square inch. With the ordinary proportion of rivets, the crushing action will in no case need to be considered in single shear joints, and only in double shear joints when the plates are less than $\frac{7}{8}$ inch thick." On the whole, Professor Unwin is "inclined to believe that the importance of crushing action has been exaggerated."

In our next chapter we shall proceed to treat of iron work as employed in roofs.

(To be continued.)

HAMMERSMITH is to have a Free Library, so the ratepayers have decided by a large majority. The Ecclesiastical Commissioners and the Copyholders of the Manor of Fulham have presented a valuable site, and Mr. Passmore Edwards has offered to provide the building, at his own cost.

AN extension of the Liverpool Library and Museum buildings to Byrom Street is urgently needed in the interest, not only of the Museum, but of the Liverpool School of Science, Technology, and Art. Ample accommodation could be found for the two bodies as well as for a public hall capable of holding 1,500 persons. We understand the Finance Committee is giving the matter careful consideration.

ANOTHER BLOW AT THE BUILDING TRADE.

THE THREATENED STRIKE.

PRESENT indications suggest that the 1st of May will see the opening of another war in the Building Trade, which must cause ruin to many of the smaller builders and misery to many of the 40,000 men employed in the industry in the Metropolis. Some time back there was published a lengthy statement of the position from both sides, Mr. Henshaw, the secretary of the Central Association, for the master builders; and Mr. Verdon, the secretary of the Building Trades' Federation, speaking for the workmen. At the time it looked as if the matters in dispute might be settled; conferences were to be held, and the points of difference did not seem difficult of adjustment. But these hopes have now been destroyed. The first conference on February 18th was certainly amicable and conciliatory in its character, but that of March 11th was just the opposite, and the negotiations were broken off. The employers put forward, in addition to minor proposals for changes in working hours and the system of payment, two main proposals, which we quote:—

"That no workman shall be placed under any disability by reason of being or not being a member of a trade society."

"That no objection shall be raised to sub-letting work, provided these rules are observed."

The Union reply to the first proposal is that the men are willing to work with non-union men as a whole; but that they claim the right to refuse to work with any of those who have acted for the Free Labour Associations or independently against other workmen when there has been a dispute. The Union holds that even if the agreement was made it would be impossible to compel individuals to keep to it, and that in any case the presence of non-union men on the works would lead to friction and quarrelling. As to the other new rule, the workmen refuse to have any hand in an agreement which acknowledges the principle it embodies. They urge that it has been recognised as wrong by the County Council, the School Board, by Government departments, and by local governing bodies, and they point out that if they enter into an agreement sanctioning the re-introduction of the system, they cannot ask these bodies to fight against it. It is further urged that a result of the system would be that the men would again have to scamp the work and rob the public. Another contention is that sub-letting of contracts would allow the employer to evade his responsibility under the Employers' Liability Act and place it upon the shoulders of the sub-contractors.

While declining to agree to this proposal, the representatives of the workmen at the conference on 11th March suggested the formation of a conciliation board composed of equal numbers of masters and men. This was, it is declared, rejected by the chairman of the Master Builders' Association, Mr. Stanley Bird, who said: "I do not see the slightest hope for a conciliation board, because you may take it for granted at once that the builders will not submit." He further declared that unless the conditions suggested by the employers were accepted, there would no longer be any recognised rules of working. Here the matter stands and, as we have said, there does not appear to be hope of settlement.

No decision has yet been arrived at with regard to the new Infirmary which it is intended to erect in connection with the Wakefield Workhouse. Mr. Herbert Beaumont, the clerk to the Board of Guardians, has applied to Mr. Watson, the architect, for details as to the cost of the proposed building, which altogether will amount to £24,500, and the matter has been referred back to the committee.

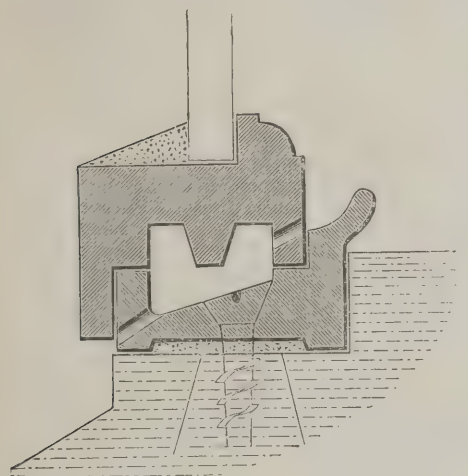
A NEW clock striking the hours on a large bell, with two external dials and hands, from the designs of the architect, Mr. Robert John Smith, of Albion Street, Leeds, has been fixed in the tower of the parish Church of Woodlesford, near Leeds, by Messrs. William Potts and Sons, clock manufacturers, of Leeds and Newcastle-on-Tyne.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in THE BUILDERS' JOURNAL, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

E. Farrar & Co.—This Company's Sloping Cill (Regd. No. 225,725), consists of an improvement in the formation of the cill of their casements of the "Climax" and "Eclipse" section, whereby any moisture gathered in the cill is readily passed away. The slope being towards the outside naturally prevents water from resting in the section, and consequently from running over inside the room. The holes drilled along the lower edge of the slope pass the water



to the outside. The sketch also shows the "Condensation Lip," which collects what moisture runs from the inside of the window and passes it down the slope of the cill to the outside. Messrs. E. F. & Co. are fitting this cill to all their best work, and the casements for the Hampshire County Council Buildings, Winchester, and several mansions, both in England and Ireland, which have been fitted in this way, have given great satisfaction.

Douglas, Isle of Man.—The details of the information from Douglas that the strike of the house painters has collapsed, is of very little importance beyond the one fact that the workmen have, after a senseless strike lasting five weeks, gone back to their work at the old rate of wage. When will these misguided work-people learn wisdom?

Manchester Improvements.—One of the inspectors of the Local Government Board has held a series of inquiries into applications of the Manchester City Council to borrow sums amounting in the aggregate to more than £260,000. Of this £100,000. was for the extension of the electric-light system in the city, £100,000. for works of sewerage and sewage disposal, £50,000. (in excess of present borrowing powers) for the building of the technical school, and £10,000. for the replacing of defective drains in the poorer parts of the city.

Drainage of the Law Courts.—The drainage of the eastern block of the Royal Courts of Justice is now being entirely reconstructed and replaced, and will take some months to finish. With the completion of this part of the building the whole of the drainage of the Law Courts will have undergone a thorough overhaul, and when finished all the latest sanitary appliances will have been provided for the various lavatories, &c. More direct access to the waiting rooms for witnesses and others will shortly be

provided by the construction of doors leading straight from the court corridor to these rooms. The first one to be opened out will be between Queen's Bench Court 9 and Probate Court 1, and will be cut through the stone wall of the court corridor.

The "Lewis Link" for Lightning Rods.

This coupling for connecting the upper terminal round rod to the flat copper tape of a lightning conductor, is the only device for its purpose which is constructed in a single piece, giving a great advantage over all other couplings, and affording a larger area of surfaces of coupling and copper tape in actual contact, which the wedge-shaped socket into which the copper tape is fixed causes to be permanent. The simplicity of its construction is best seen referring to the illustrations. Fig. 1 is a side view of the "Lewis

position, and the screwed portion

of the round upper terminal rod partly screwed through its socket; it would have been better to show this rod screwed right down upon the copper tape, where it would be when in position. Fig. 2 is a sectional view of the coupling, and plainly shows how the copper tape is permanently secured as a wedge in the coupling. Once in position it is simply impossible for the connection, thus simply made, to be broken. It was first exhibited in the Electrical Exhibition of 1892, held in the Crystal Palace, and was there considered worthy of an award by the scientific judges of matters electrical. It is, indeed, the only improvement in lightning conductors for some years, and, although small in size, is of real and obvious importance.

A MEMORIAL CHURCH AT LLANDUDNO.

THE Memorial Stone of the Duke of Clarence Memorial Church, at Llandudno, was laid on Wednesday afternoon by the Duchess of Teck, who was accompanied by the Duke of Teck. Their Royal Highnesses were received by the Bishop of St. Asaph in full canonicals. At the close of the ceremony thirty-six purses, containing donations, were laid on the stone by lady donors. The new Memorial Church is being built on an excellent site given by Lord Mostyn, in East Llandudno, and forms part of the parish of Eglwysrhos (S. Mary's). It is to be built on the cruciform plan and will consist of Nave (the portion already built) 94 feet long by 25 feet wide, with an accommodation for 450 people, with N. and S. Arcades, the Entrances being towards the N. and S. A noble Chancel 37 feet long and 25 feet wide with a Side Aisle or Chancel on side, and Vestries and O. Chambers on the other. The completed Church is calculated to seat 950 persons, and will cost about £10,000. The Architect is Mr. J. Oldrid Scott. In the general lines and in its proportion, the Church will follow the very successful Church at Rhyl, by the late Sir G. Scott, but will differ in detail as well as in the proportion and design of the tower and spire. This will stand at the S.W. angle of the Nave and will form a very conspicuous object, both from the Esplanade and from Mostyn Street. The Church is being built of a very beautiful limestone, with dressings of Bromsgrove stone, the interior facing being of Bath stone Ashlar, with dressings of Bromsgrove stone having occasional bands of its red variety. One feature of the interior is the use of the fine fossil marble from Frosterly (Northumberland) for all the main columns. The Nave benches are of oak and of substantial character. The side arches of Nave are temporarily built up, and having the future Aisle windows built in.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

CURRENT PRICES.

TIMBER.			
K H B	4 x 11 1st & 2nd Yellow...	per Std.	£18 0 0
DOM	4 x 11 3rd	"	15 15 0
PBW	4 x 11 5th	"	9 15 0
SKB	4 x 9 1st & 2nd	"	15 15 0
PTW	4 x 9 3rd	"	13 10 0
↑ ↑ ↑	4 x 9 5th	"	10 0 0
M G & Co.	3 x 11 1st (Gromme) Yellow	"	14 10 0
N R A	3 x 11 2nd	"	14 10 0
D x M	3 x 11 5th	"	8 10 0
	3 x 9 1st Onega	"	16 10 0
B S 1st S C	3 x 9 1st	"	15 0 0
DDD	3 x 9 3rd	"	13 0 0
H A B	3 x 9 3rd	"	13 0 0
D M	3 x 9 4th	"	10 5 0
R S S	3 x 9 3rd	"	9 15 0
M F D	3 x 9 5th	"	9 0 0
***	3 x 9	"	7 10 0
W S N	3 x 9	"	5 0 0
SK B	3 x 8 1st	"	12 5 0
B A T	3 x 8 1st & 2nd	"	8 5 0
S K A	3 x 7 3rd	"	10 0 0
H A B	3 x 7	"	8 5 0
OB BOLA	2 x 9 1st	"	11 10 0
G W	2 x 9 4th	"	10 0 0
H H H	2 x 8 u/s Yellow	"	8 0 0
	2 x 7	"	8 5 0
	2 x 6	"	7 10 0
	2 x 5	"	6 15 0
	2 x 4	"	8 0 0
	2 x 3	"	8 10 0
F R ¹	3 x 11 1st White	"	10 10 0
P P ¹	3 x 11 2nd	"	8 0 0
E F ¹	3 x 9 1st	"	9 5 0
J A S	3 x 9 2nd	"	7 15 0
	3 x 9 1st Spruce	"	10 0 0
	3 x 9 2nd	"	7 10 0
	3 x 9 3rd	"	6 15 0
	3 x 11 1st Pine	"	26 0 0
	3 x 11 2nd	"	17 10 0
	3 x 11 3rd	"	10 10 0
H H	1 1/2 x 7 1st Yellow	per Sq.	0 14 0
D D D	1 1/2 x 7 3rd	"	0 13 6
S B S	1 x 7 1st	"	0 11 0
S A B	1 x 7 2nd	"	0 9 6
S-TERTIA	1 x 5 3rd	"	0 7 0
J F J	3/4 x 6 mixed Yellow	"	0 8 0
Oregon Pine	... ..	per Std.	£12 to £15
Pitch Pine	... ..	£11 to £12 10s.	
"	fresh sawn	per load	40s. to 52s.
Ash	... ..	45s. to 52s.	
Mahogany, Honduras (logs)	... ..	per ft. sup.	34d. to 64d.
"	(large & prime)	"	9d. to 2s.
"	Tabasco	"	3d. to 53d.
"	Panama	"	3d. to 5d.
"	African	"	24d. to 7d.
"	(large & prime)	"	8d. to 2s.
Cedar, Cuba	... ..	33d. to 9d.	
"	Mexican	... ..	3d. to 5d.
Sequoia (clear)	... ..	per ft. cube	1s. 10d. to 2s. 3d.
Birch Planks	... ..	"	1s. to 1s. 3d.
Beech Planks	... ..	"	9d. to 1s.
METALS.			
Iron—Cleveland Pig	... ..	per ton	34s. 3d. to 34s. 5d.
"	Hematite	... ..	41s. 2d. to 41s. 5d.
"	Scotch Bar	... ..	per ton £5 5s.
"	Best	... ..	£5 12s. 6d.
"	Extra Best	... ..	£6 7s. 6d.
Yellow Metal Sheets	... ..	per lb.	4 1/2d. to 4 3/4d.
Copper—British, Best Selected	... ..	per ton	£42 15s. to £43 5s.
Sheets, Strong	... ..	per ton	£50
Australian Fine	... ..	per ton	£42 10s. to £43
Lead—Pig	... ..	"	£10
"	Sheet, English	... ..	£10 2s. 6d. to £10 3s. 9d.
Tin—English Ingots	... ..	"	£67 10s. to £68
Australian	... ..	"	£63 17s. 6d. to £64 7s. 6d.
Straits	... ..	per ton	£63 7s. 6d. to £63 17s. 6d.
Banca	... ..	per ton	£64 5s. to £64 10s.
Zinc—Sheet	... ..	per ton	£18 5s.

THE Royal Society of Artists, Birmingham, has organised an especially interesting exhibition of pictures and sketches by George J. Pinwell and George Mason, and by two or three artists of similar belief. Of Pinwell there are eighty-five examples, of Mason forty, three of A. Boyd Houghton, two of Fred Walker, and of Messrs. Charles Green and J. W. North two and ten respectively. The catalogue of the exhibition is a sumptuous publication, prefaced by three short essays, "A Group of Idyllists," "George Pinwell and his Art," and "The Character of George Mason's Painting," by Mr. Harry Quilter, and illustrated by sixteen woodcuts from drawings by G. J. Pinwell and Mr. J. W. North.

The Builders' Journal COMPETITIONS.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

THE SECOND COMPETITION.

A Village Club House.

The Proprietors of the BUILDERS' JOURNAL invite drawings, in competition, from those under twenty-six years of age, for a Village Club House, on a corner site, 150 feet by 40 feet. The Club to contain a general room with a dais for the villagers, a reading room and library, a bowling alley, service bar, tea room, committee room, housekeeper's apartments, and three cubicles for public use. The necessary outbuildings must be provided. Cost not to exceed £2,000. Drawings to be delivered at Talbot House, Arundel Street, Strand, not later than Monday, the 6th May, 1895.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS and SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.
Per line, Sixpence. Minimum charge, Eighteenpence.
Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

SAWDUST.

A NEW Gasholder is to be erected by the District Council at the Spalding Gasworks, the estimated cost being £2,500.

THE Committee of the Blackpool Corporation charged with the work of selection has decided to adopt the design for a new Town Hall submitted by Messrs. Woodhouse & Potts, of Bolton, awarding the second premium to Mr. A. Gilbertson, Liverpool, and the third to Mr. J. Lovell, London. The estimated cost of the building is £8,000, and the site selected is the land at present occupied by the disused Town Hall and adjoining buildings. An immediate start is to be made with the work.

APPLICATION is to be made by the Town Council for sanction to borrow £6,000 for the erection of new Baths at Tunbridge Wells.

ON the new Chronic Blocks at Menston Asylum, Yorkshire, £57,000 has, so far, been expended.

IT is proposed to build a New Church at Bretherton, near Croston, to seat 300 persons, at a cost of about £1,100. Mr. Andrews, of Preston, is the architect.

MESSRS. T. H. & F. HEALEY, Architects, of Bradford, Yorkshire, have prepared plans for the re-building of Farsley Parish Church Tower. The Tower is to be similar to the original structure, but so arranged as to admit of a peal of bells at a future time. Tenders have been accepted, and the work is to proceed at once.

THE Town Council of Nottingham purpose borrowing the sum of £73,000 for the purposes of sewerage and sewage disposal, £2,000 for laying out a building estate, £1,300 for the purchase of two steam fire-engines, £775 for street improvement, and £350 for the improvement of the Sneinton Baths.

THE Coseley District Council has decided that alterations and additions be made to the Council buildings, so that a new Council Chamber and offices for the Council officials be provided, at a cost of £409 15s. 8d.

THE contract for the construction of the new rifle butts at Gravesend for the Lee-Mitford range has been placed by the War Department with Messrs. B. Cooke & Co., Phoenix Wharf, Church road, Battersea.

A MAIN sewer is about to be constructed under the Seine, just above the Pont de la Concorde, for the conveyance of most of the sewage of the south of Paris. It will be 10 feet below the bed of the river, and will, it is believed, be completed by next spring.

THE plans sent in by Messrs. Marshall & Dick, Architects, Newcastle and North Shields, in the competition for new schools in Coach lane, North Shields, have been placed first in the order of merit by the assessor, Mr. E. R. Robson, F.S.A., London. The schools will provide accommodation for 1,350 children, at an estimated cost of about £15,000.

At the meeting of the Dewsbury Town Council, on Tuesday last, the recommendation of the Sanitary and Farm Committee for the erection of a refuse destructor on the site of the Old Anchor Mill, Webster Hill, was adopted. It was agreed that the new baths and library be fitted throughout for electric lighting, and that two new lodges be erected at the Park, one in Cemetery Road and the other in Boothroyd Lane.

MR. HENRY HARBEN, of Hampstead, who has taken the greatest interest in the North-west London Convalescent Homes Fund for working men, has decided to erect at his own expense a building at Littlehampton, to cost £20,000. The home will contain reading-rooms, &c., and all the latest improvements, and be lighted throughout by electricity. The work will be put in hand forthwith.

It is announced that Sir Frederic Leighton, Bart., P.R.A., will be absent from the Royal Academy banquet this year. The President was advised by Sir W. Broadbent that he must at once leave England on a prolonged holiday, and he started on Thursday therefore for Gibraltar, his first resting place. Sir John Millais, Bart., R.A., will fill the vacant chair at the banquet in May.

THE Cheshire County Council purpose borrowing £80,000 for enlarging the Upton Lunatic Asylum.

A WEALTHY Greek of Alexandria has offered half a million drachmas for the restoration of the ancient stadium or racecourse, so that it may be used for the Olympic games to be held at Athens next year.

A wonderful ivory mat is to be exhibited at Earl's Court. It is one of the only three in the World, and was made in a small hill State in the North of India. The Rajah to whom it belongs laid out a big fortune, a matter of hundreds of thousands, it is said, upon this treasure.

PLANS have been prepared by Mr. W. S. Morley, F.R.I.B.A., of Bradford, for a new Wesleyan Church and Schools at Bramthorpe.

PLANS have been prepared by Messrs. Heaton and Ralph, of Wigan, for a new School to be erected at Standish Lower Ground, Wigan. Tenders are being advertised for.

IT is proposed to extend the Asylum at Coxlodge, Gosforth, Northumberland. Plans are by Mr. J. W. Dyson, of Newcastle-on-Tyne.

THE Sedburgh School, York, which was founded in 1551 and ranks as one of the great public Schools, is about to have a new School Chapel added to it. The portion to be built first will comprise a part of the Nave and Aisles, Chancel and Vestry and Organ Chamber, with temporary Porch, leaving the west end of Nave and South Transept for future extension. The work has been let to Messrs. Brassington Bros. and Corney, of Settle, for £4,098 (including stone lining), and the cost will be defrayed by a sum raised by the masters of the School. The plans have been prepared by Messrs. Paley, Austin & Paley, architects, of Lancaster.

THE workmen have commenced clearing the ground for the purpose of laying the foundation for St. Alban's Church, Burnley. The contract for this part of the work has been let to Messrs. Smith Brothers, Burnley, but that in respect to the superstructure has not yet been decided.

PLANS have been prepared by Mr. W. C. Hardisty, of Manchester, for the new Christ Church, Moss Side, Manchester. The work is to be begun early next year if half the sum required can be guaranteed by the efforts now being made.

THE foundation stone of a new Board School has been laid at Starbeck for mixed and infants. Each department is to have a Central Hall with surrounding Class Rooms, separated by glazed screens and doors, and each Class Room accommodating 60 children. The buildings will be in the Tudor style, and of Pateley stone, with ashlar dressings. The cost of the building itself will be £6,000, which, includes the Master's and Caretaker's Houses, and with the land and furnishing, will reach £10,000. Messrs. H. & E. Marten, of Harrogate and Bradford, are the architects.

BOARD Schools are to be built in Raynham Road, Upper Edmonton. Mr. P. B. Freeman, of Staple-inn, Holborn, is the architect, and the tender of Mr. C. G. Hill, of Coventry, has been accepted for the execution of the work at £17,720.

THE tender of Messrs. Hill & Smith, Dudley, at £800, has been accepted for fencing St. Paul's Churchyard, Birmingham, which is to be laid out as a garden and recreation ground. The work will be proceeded with at once.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ABINGDON.—For building Free Library. Mr. J. S. T. West, architect:—

Bartlett Bros., Witney	...	...	£2,425	0	0
Orchard and Son, Banbury	...	...	2,239	0	0
Goodchild, Reading	...	...	2,185	0	0
Wernham, Reading	...	...	2,100	0	0
Robinson, Wolvercote	...	...	2,063	0	0
Martin, Maidenhead	...	...	2,050	0	0
Buckle, Abingdon	...	...	2,035	0	0
Grant, Banbury (accepted)	...	...	1,849	0	0
Wheeler, Abingdon	...	...	1,700	0	0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.ASTRAGALS
OF
COPPER OR ZINC

BRICKS

2½ or 3 inch PRESSED BRICKS
Cheaper & Better than STOCKS.LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.METAL
CASEMENTS of
every description.
GLASS ROOFING
Shelley & Co's & Hopes PatentsHENRY 55
HOPE LIONEL ST.
BIRMINGHAM
LONDON, 13 King St
Cheapside
MAN-
CHESTER 8 Exchange
Arcade.ACCRINGTON.—Accepted for the erection of a post office,
Church-street, Accrington, for Mr. Edmund Riley, Accrington.
Messrs. Haywood and Harrison, architects, Accrington.
Quantities by the architects:—

Cronshaw, Thomas, masonry	£1,395	3	6
Nuttall, Richard, joinery	808	14	0
Evans and Co., slating	97	5	0
Carter and Sons, plumbing	424	0	0
Wilson, Arthur, painting	52	18	9
Douthwaite, John W., plastering	70	9	0
Architects estimate, smithing and ironfounding	135	0	0

£2,983 10 3

[All of Accrington.]

BLACKHEATH.—For additions to West Bank, Lewisham
Hill. Mr. J. B. Wall, F.R.I.B.A., Bexhill, Sussex, architect.
Quantities by Messrs. J. S. Lee and Sons, Craven-street,
W.C.:—

Foster and Dicksee	£1,698	0	0
Colls and Sons	1,685	0	0
Downs, W.	1,646	0	0
Higgs and Hill	1,644	0	0
Holloway, H. L.	1,518	0	0
Jerrard and Son	1,451	0	0
Charteris, D.	1,429	0	0
Leng, T. D., Deptford (accepted)	1,277	0	0

BROTHERTON.—For new schools, master's house, &c., at
Brotherton, for the Brotherton School Board. Mr. J. H.
Greaves, architect, 38, Albion-street, Leeds:—

Spur, G., Pontefract, excavator, brick- layer and mason	£1,200	0	0
Barker and Jowitt, Pontefract, car- penters and joiners	674	12	0
Garbutt, G., Normanton, slater	161	5	2
Powell, J., South Milford, plumber and glazier	150	0	0
Marsden, F. H., Knottingley, plas- terer	125	0	0
Powell, J., painter	45	0	0
Architect's estimate	2,350	0	0

BURTON-ON-TRENT.—For alterations to the Chancel of
Rangemore Church, Burton-on-Trent, for the Right Hon.
Lord Burton. Messrs. G. F. Bodley, A.R.A., and T. Garner,
architects. Quantities by Messrs. Northcroft, Son, and
Neighbour:—

Smith, G. F., and Sons	£2,670	0	0
Stephens, Bastow and Co., Ltd.	2,399	0	0
Franklin, H. R.	2,226	0	0
Rudd and Son (accepted)	2,135	0	0

BEXHILL.—For the erection of hotel and public hall,
Station-road, Bexhill, for Mr. J. P. Goodwin. Mr. J. B.
Wall, F.R.I.B.A., Bexhill, Sussex, architect:—

Jenkins, P., St. Leonards, per schedule of prices.

(Accepted.)

[Architect's estimate, £3,500.]

BIRMINGHAM.—For making, &c., seven new roads, Grange
Estate (two miles), King's Heath, for the Birmingham Free-
hold Land Society. Mr. Thos. S. Fallows, surveyor, 59,
Temple-row, Birmingham:—

Hall	£10,300	0	0
Biggs, Jacob	9,250	0	0
Law, Geo.	9,001	0	0
White, John	8,975	18	9
McKay	8,805	13	3
Jones and Fitzmaurice	8,774	0	0
Currall and Lewis, Birmingham*	8,646	6	7

* Accepted.

GODALMING.—For the erection of New Cemetery Buildings
for the Godalming Burial Board. Messrs. Welman & Street,
architects, Godalming and Guildford:—

Smith, W., Farnborough	£3,150	0	0
Mitchell Bros., Shalford	3,147	0	0
Hall, T. F., Godalming	3,140	0	0
Kinglee, T. H., Oxford	2,867	0	0
Milton, F., Witely	2,796	0	0
Peters and Son, Horsham	2,735	0	0
Horn, G., Godalming	2,644	0	0
Harris & Son, Woking (accepted)	2,625	0	0

GREYWELL.—For erection of new board school at Grey-
well, near Odham, for the Greywell School Board. Mr. J.
Alfred Eggar, Architect. Quantities by Architect.

Hellis, E., Odham	£1,550	0	0
Poole and Son, Hartley Wintney	1,450	0	0
Fitt, McC., E., Reading	1,387	0	0
Kemp, J., Froyle	1,341	16	4
Liming Bros., Crookham	1,300	0	0
Musselwhite and Son, Basingstoke	1,295	0	0
Jenkins and Sons, Bournemouth	1,266	0	0
Cooper, J., Odham	1,250	0	0
Chinchen, W. J., Bournemouth	1,200	0	0
Sims, J., Basingstoke	1,195	13	0
Thumwood, J., Basingstoke (accepted)	1,159	11	6

HARROGATE.—For building four villas at York-place,
Harrogate. Mr. W. H. Beavers, architect, 25, Bond-street,
Leeds.

Rhodes Bros., Shipley, masons, brick- layers, joiners and slaters	£3,861	0	0
Moody, J. W., Shipley, plasterer and concreter	477	0	0
Thompson, G., Leeds, plumber	385	0	0

CARTER & CO
TILES MOSAIC
FAIENCE
Poole DorsetHARROGATE.—For erection of school building at Smithy-
hill, for the Harrogate School Board. Mr. T. Edward Mar-
shall, architect, Princes-street, Harrogate.

Tenders accepted.

Wilson, M., Leeds, excavator, mason and brickwork	£8,200	0	0
Deacon, J., Shipley, joiner	2,714	0	0
Cook, J., Huddersfield, concrete	835	0	0
Barraud, T., Leeds, plumber	799	0	0
Rushworth, Harrogate, ironwork	558	2	0
Blackburn and Davenport, slaters	422	0	0
Blackburn and Davenport, Halifax, plasterers	301	0	0
Cook, J., asphalte	202	17	0
Hutton, H. E., Shipley, painter	160	0	0

LONDON.—For internal finishings, panellings, &c., to No.
22, Old Queen-street, Westminster, for Mr. Leo Schuster.
Mr. A. William West, architect, 44B, Maddox-street, W.
Quantities by Messrs. Duck and Bousfield, Billiter-square
buildings, E.C.

Turner, Lord and Co.	£1,411	7	6
Litchfield	1,154	14	7
Holland and Hannen	1,090	0	0

LONDON.—For the completion of fourteen houses, Brixton,
for Messrs. A. & J. Wise. Mr. Henry J. Wise, architect, 38,
Basinghall-street, E.C.:—

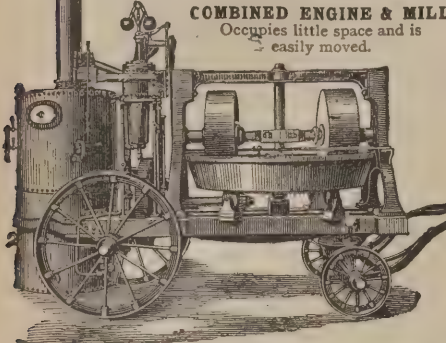
Smith and Sons, W.	£950	0	0
Coates, W.	817	0	0
Linfield, T.	756	0	0
Minty, J. P.	737	0	0
Brown, Henry	705	0	0
Smith, T. F.	693	10	0
Godfrey, G. T.	675	0	0
Scott, Walter	640	0	0
Glass, John	585	0	0
White and Sons	580	0	0
Chapman, J. G.	545	0	0
Asplands and Co., 2, Stafford-street, Peckham (accepted)	479	5	6
Ashmole and Grant	467	10	0

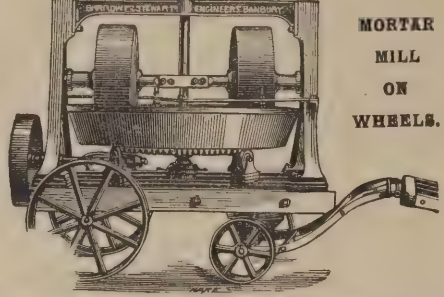
LYMINGE (Kent).—For the erection of lodge, administrative
buildings, kitchens, dining hall, chapel, &c., the Workhouse.
East End Hill, for the Elham Union Guardians. Mr. Joseph
Gardner, 2, Cheriton-place, Folkestone, and Mr. John Ladds,
7, Doughty-street, W.C., joint architects. Quantities by Mr.
Thomas Ladds and Mr. Alfred Boxhall.

Amos and Ford	£19,263	0	0
Webster, R.	19,100	0	0
Denne, W. and F.	16,676	0	0
Hayward and Paramor	16,557	0	0
Willmott and Sons	16,445	0	0
Fearow, T. L.	16,277	0	0
Peters, P., and Son	16,199	0	0
Girling and Coe	16,105	0	0
Denne, G. H., and Son	15,940	0	0
Stiff, Herbert	15,935	0	0
Wallis and Son, Maidstone (accepted)	15,764	0	0

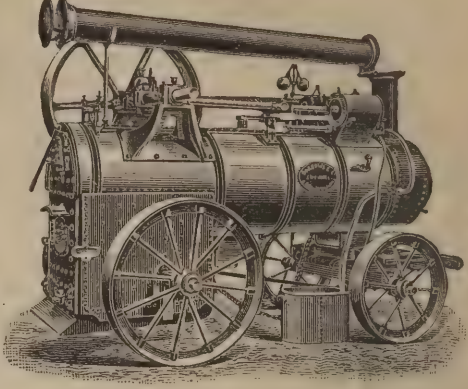
BARROWS & CO., LTD., BANBURY.

COMBINED ENGINE & MILL
Occupies little space and is easily moved.





MORTAR MILL ON WHEELS.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

NEWTOWN.—For new factory, Newtown, Montgomeryshire for Messrs. Pryce Jones, Limited (Contract No. 11). Mr. George Hornblower, A.R.I.B.A., architect, 20, Fitzroy-street, W. Quantities by architect:—

Foster and Dicksee	£10,750	0	0
Treasure and Son	9,173	0	0
Watkin, Aaron	8,847	19	10
Davies, E., and Son (accepted) ...	8,750	0	0

NORTHAMPTON.—For the erection of school buildings, Cogenhoe, for the School Board. Mr. H. H. Dyer, architect, 1, Sheep-street, Northampton. Quantities by the architect:—

Souster, G. W.	£1,517	5	0
Abbott, C. W.	1,405	6	0
Fisher, G. J.	1,444	0	0
Sturgess, W., and Sons	1,399	0	0
Martin, H.	1,389	0	0
Bransom, G., and Sons	1,355	0	0
Clayson, M.	1,350	0	0
Sharman, E. D.	1,320	0	0
Hawtin, A. P.	1,300	0	0
Throssel, W.	1,280	0	0
Wilford and Judkin	1,252	0	0
Johnson, F., and Son	1,247	0	0
Whitbread, W. T.	1,234	10	0
Panting, J. M.	1,234	10	0
Adams, N.	1,230	0	0
Sharman, J. C., Cogenhoe*	1,174	15	0

* Accepted, subject to the approval of the Education Department.

NOTTINGHAM.—For laying concrete floor and making alterations at premises in Roden-street, for Messrs. Combe & Co., Ltd., Mr. W. D. Pratt, architect, Long-row, Nottingham. Quantities by architect:—

Thomas, J. G.	£380	0	0
Wilkinson & Co.	361	0	0
Lovett, G. T.	360	0	0
Messom, F.	303	0	0
Gilbert & Gabbitass	290	0	0
Bell, A. G.	286	0	0
Barlow, T.	263	8	7
Fisher, R.	259	17	6
Simpson, R.	250	0	0
Attenborough, J.	229	0	0
Evans, F., Basford, Nottingham* ...	220	10	0
Fields, J.	196	8	8

* Accepted.

OXFORD.—For the erection of a shop and a hygienic bakehouse, not including oven. Mr. Harry Geen, Okehampton, architect:—

Sleeman, J.	£423	10	0
Harris and Geen	399	0	0
Worden, E. (accepted)	345	0	0

SURBITON.—For the erection of three shops and premises, Brighton-road, Surbiton. Mr. G. Warren Cooper, architect:—

MacCallum, J. (accepted)	£2,362	10	0
---------------------------------	--------	----	---

TEDDINGTON.—For the erection of four shops and premises, Broad-street, Teddington. Mr. G. Warren Cooper, architect:—

Saunders, J. E. (accepted)	£2,380	0	0
-----------------------------------	--------	---	---

WEST HAM.—For St. Matthew's Church and Parochial Hall, St. Matthew's-park, West Ham, for the Rev. R. Arnold Pelly. Mr. E. P. Loftus Brock, F.S.A., architect:—

Mattock Bros.	£4,284	0	0
Reed, A., and Son	4,187	0	0
Allen, J., and Sons	4,050	0	0
Minter, F. G.	4,000	0	0
Watson, W.	4,000	0	0
Scott, S. J.	3,917	0	0
Smith, J., and Son	3,860	0	0
Farmer, S. G.	3,814	0	0
North, C. (withdrawn)	3,550	0	0

WHITCHURCH.—For building ten cottages for the Trustees of the Loyal Good Samaritan Lodge, Whitchurch, Shropshire, Independent Order of Oddfellows, Manchester Unity, Friendly Society. Mr. J. Harry Pickard, architect, Whitchurch:—

Dodd, George	£1,855	0	0
Pickard, E. S.	1,700	0	0
Corfield, John	1,560	0	0
Edge, George (accepted)	1,387	0	0

Reading Cases may be had on application to the Manager. Price, 2s. each.

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,

48, HAMMERSMITH ROAD. W

SMOKEY CHIMNEYS & DEFECTIVE VENTILATION.



Chimney Top.

THE
"DULCE DOMUM"
CHIMNEY TOPS & VENTILATORS
(Downes' Patent).

The only Chimney Top which can be Easily Swept with the Ordinary Apparatus without being damaged. A Positive Preventative of Down-Draught, so Constructed that it Creates a Continuous and Powerful Up-Draught. Simple in Construction having No Movable Parts, Nothing to Oil or Repair. Cannot Get Out of Order. Strongly Made in Galvanised Iron. Once Fixed will Last for Years. Applicable also for Ventilating Public Buildings, &c.



Soil Pipe Ventilator

Builders, &c., testimonials can be seen and prices obtained at the Patentee's Offices—

11, THE PARADE, Lewisham High Rd., New Cross, LONDON, S.E.

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.

SLATE MERCHANT, SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,

Bethnal Green, London, E.

CONTRACTS OPEN.

TO BUILDERS.

The Managers of the Metropolitan Asylums Board hereby invite TENDERS for the ERECTION OF STAFF QUARTERS at the South Wharf, Rotherhithe-street, Rotherhithe, S.E.

Copies of the bills of quantities and form of tender may be obtained, and the conditions of contract inspected at the Board's Offices, between the hours of Ten and Four, upon depositing the sum of £10 (in gold or Bank of England Notes), which will be returned to the depositor if he sends in a bona fide tender accompanied by bills of quantities in accordance with the terms of this advertisement.

The drawings and specification can be inspected at the Offices of the Architect, Mr. T. W. Aldwinckle, 1, Victoria street, Westminster.

Tenders, sealed and endorsed, "Tender for Staff Quarters, South Wharf," are to be delivered at the Board's Offices, not later than Twelve o'clock noon on SATURDAY, the 20th inst.

Tenders must be accompanied by the bills of quantities in a separate sealed envelope with the tenderer's name outside.

The Managers do not bind themselves to accept the lowest or any tender.

T. DUNCOMBE MANN,
Clerk to the Board.

Offices of the Board, Norfolk House, Norfolk street, Strand, W.C.

April 3rd, 1895.

TO BUILDERS AND OTHERS.

The Streets Committee of the Commissioners of Sewers of the City of London will meet in the Guildhall of the said City on TUESDAY, the 30th day of APRIL, 1895, at TWO o'clock precisely, to receive TENDERS for the CONSTRUCTION OF UNDERGROUND CONVENIENCES in Circus-place, Finsbury-circus, and in Cannon-street at its junction with Queen Victoria-street, according to plans and specifications to be seen at the Office of the Engineer to the Commissioners, in the Guildhall.

Tenders are to be on the forms supplied at the said Office, to be sealed, endorsed "Tender for Underground Conveniences at Circus-place" (or Cannon-street, as the case may be), be addressed to the undersigned, and delivered before TWO o'clock on the said day.

Persons sending in proposals must attend personally, or by a duly authorised agent, at TWO o'clock on the said day.

Security will be required for the due performance of the contracts.

The Commissioners do not pledge themselves to accept the lowest or any Tender.

Sewers Office, H. MONTAGUE BATES,
Guildhall, March, 1895. Principal Clerk.

TO BUILDERS.

The Commissioners of H.M. Works and Public Buildings are prepared to receive TENDERS for the ERECTION of a NEW POST OFFICE at Tunbridge Wells.

Drawings, specification, and a copy of the conditions and form of contract may be seen on application to the Postmaster.

Bills of quantities have been prepared for the use of the builders by Messrs. Lee and Sons, of 35, Craven-street, Strand, and, together with forms of tender, may be obtained at H.M. Office of Works, 12, Whitehall-place, S.W., on payment of One Guinea. The sums so paid will be returned to those persons who send in tenders in conformity with the conditions specified below.

The Commissioners do not hold themselves responsible for the accuracy of the quantities, nor do they bind themselves to accept the lowest or any tender.

Tenders are to be delivered before Twelve o'clock noon, on FRIDAY, the 26th day of April, addressed to the Secretary, H.M. Office of Works, &c., 12, Whitehall-place, London, S.W., and endorsed "Tender for Tunbridge Wells New Post Office."

H. W. PRIMROSE,
H.M. Office of Works, &c. Secretary.
April 3, 1895.

TO BUILDERS.

TENDERS are invited for the ERECTION OF SEVEN SHOPS and DWELLING-HOUSES on the Gordon House Estate, at corner of Chiswick High-road and Chiswick-lane.

Plans and specification can be seen at our offices on and after Wednesday, April 17th; and tenders endorsed "Shops, Chiswick," will be opened on WEDNESDAY, May 1st, at Twelve o'clock precisely.

The lowest or any tender not necessarily accepted.—Messrs. F. and W. STOCKER, Surveyors, 90 and 91, Queen-street, Cheapside, E.C.

The Builders' Journal.

Vol. I., No. II.

Tues., April 23, 1895.

ILLUSTRATIONS.

A Cottage at Staplefield, by Frank T. Baggallay . . .	r61
Design for District Offices, by Frank T. Baggallay ..	r63
A Cottage at Bromley: Frank T. Baggallay, Architect	r65
La Maria Bergamo, Maggiore:	
A Sketch by Frank T. Baggallay	r65
Home Loch, Allen, Ireland: Leonard Stokes, Architect	r67
Portrait of Mr. W. B. Richmond, A.R.A.	r68

CONTENTS.

Decorating Railway Stations	161
The Archaeological "Find"	161
Flat Law Again	162
Sir George Scharf	162
The Institute and the A. A.	162
Building Tools in Ancient Egypt	162
A New Architectural Feature in London.	163
Discovery of a New Race	163
Bricks and Mortar	164

The Builders' Journal.

Decorating Railway Stations.

Decorating Railway Stations.

THERE is a flutter in the daily papers because a Railway Station is going in for the beautiful. The attack is quite mild — only a few fine photographs at Paddington—but more than one enthusiastic writer has dared to hope that Art and Architecture may yet find Waiting Room accommodation at our great termini. We are not carried away by a photographic screen, excellent though the idea be. Awaiting departure, a decent picture helps to while away the time. So, too, does Somebody's Soap and Other People's Mustard. There is no lack of colour decoration—of a sort. Unfortunately, there are no half-tones; the pigments are elemental. But it is interesting to consider what has been done by Railway Companies architecturally. The Midland Railway have given us St. Pancras, an excellent specimen, in its way, and the South-Eastern, in a moment of unaccountable generosity, reproduced for us the Mediæval Cross that stood in the village of Charing. Then there is the Doric archway at Euston, which rather frowns down on the timorous traveller. But as for Liverpool Street, King's Cross, Waterloo and Victoria—could even Railway Companies surpass these in dreariness and dinginess? In the provinces, Lime Street Station, Liverpool, and the Park Hotel and Station, Preston, both on the North-Western, are, perhaps, as good specimens as may be found, the former with its fine facade, and the latter with its hotel reminding one of a French chateau. But there is plenty of room in London and in the Country for the bestowal of more attention on the graphic and plastic Arts by our railway companies, and internally, even in stations of some structural sense of proportion, is a field for artistic effort absolutely untouched. Abroad something has already been done



A COTTAGE

in this regard. A railway station at Milan has several mural frescoes allegorically typifying Rome and Venice. What a comparatively poor and unremunerative company can do should be easily excelled by our opulent railway organisations. The Entrance Hall and the Waiting Room might, at least, be made pleasing and picturesque to the eye, instead of the insufferable draughtiness of the one and the unsupportable dinginess of the other. As a matter of fact, the average Waiting Room, with its scroll of warnings for the day, and its inquisitiveness as to your spiritual welfare, is the sublimest piece of grotesque that railway companies have ever perpetrated. On the other hand, the subjects for decorative painting and sculpture at rail-

traffic is in correspondence with Continental lines might exhibit views of foreign lands. The experiment of making our railway stations internally artistic should be attempted, and this essay at Paddington may be the forerunner of better things in the days when the pencil again claims somewhat of its own from the ubiquitous camera.

The discovery by Professor Petrie of the remains of an hitherto unknown race in Upper Egypt comes as a surprise to Archaeologists and Egyptologists. The "find" may well be described as the climax of the Professor's patient and persistent research. It is true that the explora-

tions at Naukratis and Daphnæ, and the unearthing of the earliest known Temple at Medum, had already added vastly to our knowledge. Moreover, we³ are indebted to Professor Petrie for fragments from the works of Plato and Euripides. But the recent discovery of two thousand tombs containing evidence on one of the early alien races in Upper Egypt, seems to mock, Sphinx-like, at our Museums and Collectors. Here is a field that no other has touched, and our archæological pride is humbled. Near Thebes, Prof. Petrie has found a town mentioned by Juvenal, and near by was another town, "in which not one single object was

found which was known in any other Egyptian town." Again, three or four miles away, another town! The approximate age of the two thousand tombs examined, was determined by the fact that many of them were dug in the passages leading to Egyptian tombs of the Fourth Dynasty. Therefore, the newly-discovered race upon the plains of Thebes must have been buried three thousand years before the birth of Christ. They had nothing in common with the Egyptians; their mode of burial, for instance, being devoid of embalming. The body was simply put down in a crouching position, the head being severed and the marrow extracted



A COTTAGE AT STAPLEFIELD: FRANK T. BAGGALLAY, ARCHITECT.

from arm and thigh bones—a gruesome ritual. Rather remarkably, seeing this race was far behind the Egyptian in intelligence, they were by no means ungraceful workers in clay. Unacquainted with the potter's wheel, they yet managed to turn out some highly finished hand-made pottery. The Professor's theories as to the origin of the new race are interesting. They could not have come from the north, since they would then have been influenced by Egyptian culture, nor from the south, since they were not negroes. They must, therefore, have come from the east or the west, and, adopting the second alternative, they were probably one of two branches of the Libyan race inhabiting North Africa which migrated eastwards about the sixth dynasty, the one towards Syria and the other towards Upper Egypt. The evidence of the pottery and the carved figures found in the tombs appears to lend some countenance to this theory.

Flat Law SCARCELY a week passes without the public being disturbed again. by the in-dwellers of Flats. The in-dwellers themselves are also disturbed—by the overhead piano and other criminal accessories. There may be one Law for the rich and another for the poor, but there would appear to be neither Law, Order, nor Justice in Flats. Every Flat knocks his neighbour a little flatter. The "case" of General Graham, who occupies rooms in Buckingham Palace Mansions, is particularly instructive in showing how utterly powerless the Law is to deal with nuisances of noise and other character, where a small colony of people are content to be sheltered by the one and identical roof, however high. The General applied to Mr. Shiel, at Westminster, for advice as to whether anything could be done to stop "strumming" on the piano, which a lady, who had recently taken the flat above, persisted in nearly the whole day long. He had a daughter who was very ill, and the noise from the instrument prevented her getting rest. He had a doctor's certificate that the piano tended to aggravate her condition. A written remonstrance from applicant, followed by one from his solicitor, had no beneficial effect. The case was too serious to be lightly regarded, but the magistrate's inability to suggest a legal remedy was the drollest piece of unconscious humour. The best thing to do was to induce the lady to cease playing! Exactly. But then any Board School boy would have known that. The diagnosis of disease is nothing unless you can clap on a remedy. In this case there was simply the disease—of piano playing. It is a disease most prevalent in "upper parts," "semi-detached," and it attains its virulence in "flats." Mr. Shiel and the Law could only fall back upon "decent feeling" as the remedy. We have rather lost faith in "decent feeling." For one thing, it does not always seem to exist. General Graham found no redress, and his case once again demonstrates that the Flat system wants thoroughly re-adjusting. Nothing but an enforced agreement, to be signed by all the tenants, undertaking not to annoy their neighbours, will meet the difficulty, and even then what quibbling there will be over the word annoyance! The builders of flats had better make their floors sound-proof.

Sir George Scharf. THE death of Sir George Scharf, Director of the National Portrait Gallery, did not come as a surprise to his friends. We were aware that his condition was grave several weeks ago. Sir George was the son of a Bavarian artist who settled in London early in the century. He was born in December, 1820, educated at the University School, and

having developed artistic inclinations under the tuition of his father, he was admitted a student of the Royal Academy in 1838. A series of etchings by him, illustrating Macready's Shakespearean revivals, was published in the same year. In 1840 Mr. Scharf travelled in Italy, and accompanied Sir C. Fellow in a journey through Asia Minor, to which country he returned in 1843 as draughtsman to a Government expedition. A large collection of his drawings is deposited in the British Museum. On coming back to England, although he exhibited a few oil pictures, his talents were chiefly devoted to book illustration. Mr. Scharf maintained many of the characteristics of the Flaxman School. In 1857, he was appointed Art Secretary of the Manchester Art Treasures Exhibition. At the close of that Exhibition, he became Secretary and Keeper of the National Portrait Gallery, an office which he held for 25 years, when he was constituted Director of the institution, which is mainly indebted for its success to his untiring energy and industry.

THE INSTITUTE AND THE A. A.

II.

ONE of the first reforms—if it be deemed a reform—necessary in the administration of the Institute, is in the length of its Presidency. If the attributes of Presidency be carefully detailed: the architectural faculty in its highest flight; social position; the power of creating and retaining respect; personal bearing; the unflinching and unbending determination of a strong-minded man—then it must be admitted there are not more than a dozen men in practice qualified to fill the Presidential chair of the Institute. No institution, formed for the advancement of any of the fine Arts, should be influenced by the popping in and the popping out of yearly Presidents. Be the man ever so strong and self assertive, it is quite impossible for him to make any beneficial impression in so short a period as twelve months; and one has only to discover the lesson taught by every kindred fine art society to see that Architecture stands almost alone in attempting it. The system now in vogue, and, if we know anything of human nature—especially the human nature of English architects—likely to be in vogue until a perfect revolution of architectural things happens, lends itself to an enormous amount of vexation of spirit and corrupt practice. The ballot box is the curse of everything it appertains to; its rattle is the knell of parting peace, awakening all the petty jealousies which slumber but lightly under an irritating cloak of indifference and respectability. Can we look down the list of presidents for the past five and twenty years and discover half-a-dozen men who were really fitted to represent the Architectural Art of England? And what of the rest?

If the Council of the Institute is human enough to imagine, or frail enough to discover, that a body of professional men must depend upon mutual admiration for its success, then things must be in a very poor way. For our part, we think it entirely wrong in either of such conclusions. It is the weakness of the administration that frightens so many good men. It is the numerous personal motives floating about the business of the Institute that sickens so many "outsiders." The Institute is like a big jelly fish possessing a certain amount of fascination for young people, without a backbone to satisfy their elders. Grey-haired as it is in its respectability of years, its grandchildren do not hesitate to discuss its general health, to ridicule it, even to throw stones at it. Its authority and dignity are so evanescent that a number of its children run

away and make up a game of their own, and are allowed to continue in their shocking behaviour instead of being thrashed for their impertinence and (professionally) whipped off the face of the earth. Whilst the majority, men within and without the portals of the Institute, treat most of these things with sublime indifference, we have for many years watched most carefully the progress of events. We have discovered much; not, however, a single benefit to architecture emanating officially from the Royal Institute of British Architects. Its existence has never inspired a single man to higher aims; its dignity has never deterred a single unsuitable man from "becoming" an architect. Of deeds it has no record, of influence it is dumb, and so it devotes its energies to examining the young, and passing vapid obituary condolences on the old. That being the present condition of affairs, it looks a difficult task to bring the Institute up to the proper level of its usefulness and importance. Who is to perform the task we do not know. We candidly confess we could not name a man. Did George Edmund Street but live, and in the prime of life, he might have grasped the true position and have been the one man to have started the movement. These movements want but a very little primary force to put the natural laws of change into motion. It is but the first plunge; if some one would but start, all would soon be tumbling into the Waters of Lethe, and emerging freed from the infirmities that flesh is heir to. Where is the architectural equivalent of the President of the Royal Academy? If such a man exists let him be found, for a glorious opportunity awaits him. Granted a longer lease of Presidential life, he could gather round him the flower of English practice—Norman Shaw, Champneys, Pearson, Jackson, Waterhouse, Aitchison, Belcher, George, and others. They would come in for their own self-respect could no longer permit them to remain outside. And then the noble band of "youngsters, coming on,"—Reginald Blomfield, Douglas Caröe, Arthur Street, Waterhouse, jun., Halsey Ricardo, and dozens more we cannot stay to mention, would bring pure architectural blood into the mass of infirmity passing as the Architecture of a civilised age. Fellowship could then die down to a normal number of one hundred—the Elect; and death alone should be the cause of repletion. Associateship could be what it is now, except that a candidate should come with *proof* of his reputation in his own right hand, instead of presenting himself, stuffed like a Michaelmas goose, for examination.

(To be continued.)

BUILDING TOOLS IN ANCIENT EGYPT.

THE brickmakers used moulds, probably of wood, for making the bricks, stamps to impress on them the requisite names or inscriptions, vases for the water to mix with the clay, and yoke across the shoulders to carry them to their destination, and plumb-lines to keep the walls perpendicular. In the time of the eighteenth and nineteenth dynasties foreign captives under Egyptian superintendence were employed. The plasterer used a kind of adze and spatulæ for laying the plaster on walls of clay mixed with straw, smoothers to flatten the surface, coarse brushes of palm fibres, and paint pots to whitewash and colour it. Wooden objects first had a piece of cloth or linen glued on them, and the plaster was afterwards laid upon it and smoothed over.

ADDITIONAL accommodation for cattle from America is about to be provided by the Mersey Dock and Harbour Board, at the Wallasey Section of the Birkenhead Receiving Wharf, the expenditure involved being upwards of £30,000.

A NEW ARCHITECTURAL FEATURE OF LONDON.

THE OFFICE FOR THE PRESERVATION OF RECORDS.

THE old Record Office, containing the national archives, had long ago outgrown the accommodation provided in the Tudoresque building lying between Fetter Lane and Chancery Lane, erected in 1856. Prior to that date the records of public affairs were distributed over no fewer than sixty places, and were as inaccessible to the searcher as they were widely scattered. When at last they were brought together under one roof in the present building on the Rolls estate, which was erected from the designs of Sir J. Pennethorne they formed a collection of great size and importance. They had no equal, declared Sir Francis Palgrave, in the civilised World in antiquity, continuity, variety, extent, and amplitude of facts—containing, in fact, full materials for the history of the country, civil, religious, political, social, moral, or material, from the date of the commencement of the Domesday Book to the present day. But the building, which at the time it was believed would hold all the records that would accrue for fifty years at the least, soon grew too small. In twelve years it had to be enlarged. In forty years it has had to be supplemented by the new building in Chancery Lane, which, within the last few days, has been opened up to view. The building now in use was a substantial, though not handsome, structure, partaking too much of the unrelieved German type; the new building will rank as one of the architectural features of London. In course of time it will be followed by another block, which will necessitate the demolition of Rolls House, connecting the new building with the old; and a further block will be built on the vacant site in Fetter Lane, which is now an eyesore to the neighbourhood. There will then be a complete quadrangle of buildings, forming a Record Office in every way worthy of the multifarious and varied collections of papers, books, and documents deposited within them. The completion of this scheme will take many years. At present the Office of Works is only concerned with the Chancery Lane block. Now that the hoarding is removed, the facade is visible, and will be generally admired. It is at present a mere shell. Inside all is a chaos of ladders and building material. The exterior, however, leaves little to be desired. There is a handsome Gothic doorway flanked by two square towers, and two large windows above. At the extreme corners are hexagonal towers, and all the towers have stone turrets. Altogether the building covers a site 225 feet long and 65 feet wide; and the whole of the work reflects credit upon Mr. Taylor, Surveyor of Her Majesty's Work and Public Buildings in London.

In arranging for the extension of the Record Office, Mr. Taylor was handicapped by the fact that the present office, designed by Sir J. Pennethorne, was designed to face a thoroughfare that was never completed. At that time a project was on foot—indeed was practically decided upon—to construct a new arterial thoroughfare from Piccadilly Circus cutting through Long Acre, and, absorbing Carey Street, leading into the heart of the City, the design being to relieve the Strand, on the one hand, and Holborn and Oxford Street on the other. But the only bit of the road ever made—unless Coventry Street is included—is that which fronts the present Record Office. This accounts for the curious situation of the building, which seems to have been dropped down hurriedly in a builder's yard and forgotten. The scheme was one that could not be revived, for in the meantime the new Bankruptcy Court had been erected directly on the line of route. The scheme, therefore, by which with successive blocks of buildings a perfect quadrangle will ultimately be formed, was decided upon. This sealed the fate of Rolls House, a very unpre-

tentious structure, which has been used as an adjunct of the Record Office, mainly being used by Mr. Lyte, the deputy-keeper, and his assistants. This will come down before the next block is commenced, the few relics in it being carefully preserved.

It was at first intended that the Rolls Chapel, which has been very justly described as "singularly ugly and plainly built," should also be removed. But it has many associations and a rather curious history. Originally it was a hospital for converted Jews; and afterwards it was used for the storing of the early records of the Court of Chancery after they were removed from the Tower, subsequently becoming the Rolls Chapel. It was built during the reign of Henry III., at the King's expense, having then a tower, which disappeared many years ago. The Chapel itself, however, was in so good a state of repair that it was declared to be an act of vandalism to remove it. It was, therefore, arranged that the north wing should be carried on arches over the Chapel, which will subsequently be used again, as it was for several generations, for the storing of some of the more important of the Records.

In order to avoid danger to the safety of the records by fire, the most elaborate precautions have been taken in the new building. Only the smallest possible quantity of wood has been used. All the rooms are lined with iron. Doors of iron are provided everywhere. Hydrants and fire-extinguishing appliances are fitted to every floor; and there will be as few

people. The greatest surprise is created among both by the fact, not generally known, that there are two Domesday Books—though the singular number is invariably used in speaking of them. Those who see them for the first time are also surprised to find them no larger than an ordinary family Bible. The various old charters are curious and fairly complete, though lacking the most important, the "Magna Charta," which is in the possession of the British Museum.

DISCOVERY OF A NEW RACE.

LECTURE BY PROFESSOR PETRIE.

A LECTURE was delivered before the Royal Society, Edinburgh, by Professor Petrie upon the results of his recent archaeological excavations and researches in Egypt, which include the discovery of a new race, whose existence was hitherto unsuspected in that ancient land. After describing the district in which he and his companions had been at work—namely, between Ballas and Negahdeh, about thirty miles north of Thebes—Professor Petrie said that a quarter of a mile from the ancient Egyptian town of Nubt, which was discovered to be the centre of the worship of the prescribed god Set, lay another site of a town. Not only was a town found, but also a series of cemeteries of this same new race; and altogether nearly 2,000 graves have been completely excavated, every object noted in position, and

everything preserved and marked. The result of this thorough exploration was most strange and inexplicable. In this great number of graves not a single Egyptian object was found, and not one body was mummified or buried at full length; all were contracted, with the knees bent up to the arms. The position was always with the head to the south and the face to the west. The extent of this race is shown by their characteristic objects having been found abundantly as far north as Abydos and as far south as Gebelen. This is a district of rather more than a hundred miles in length, opposite to the Great Oasis and the Western Oasis, which would give access to it across the desert from the West. The age of this people was the next problem, and we can, said the Professor, definitely say that they were between the VIIth and IXth dynasties, or about 3000 B.C.; and they probably were the people who overthrew Egyptian civilization at the close of the old kingdom, and so pro-

duced that dark age of the VIIth and VIIIth dynasties, when the Egyptians seem to have been narrowed and oppressed by disaster. The arts were well advanced in most ways. In pottery these people excelled. The exquisite colouring of the red vases, showing every shade of crimson, with brilliant black tops, produced by being burnt in the ashes, is more rich than in any Egyptian ware. Who this unknown race were and from whence they came, said Professor Petrie in conclusion, cannot yet be decided. It may be proved in future that these were a branch of the same eastward migration of Libyans, which founded the Amorite race in Syria. But the remains of both the people and their works must be thoroughly studied, and further research made for other settlements of theirs, before positive conclusions can be drawn.

YESTERDAY afternoon, Sir F. S. Powell, Bart., M.P., formally opened, and handed over to the Borough, the Boys' Reading Room, in connection with the Free Library, at Wigan, which he has erected at his own expense, the cost being between £3,000 and £4,000. The building is situated in close proximity to the Free Library, which is regarded as one of the best in the industrial centres of Lancashire. Mr. Wm. Winnard, the contractor, handed to Sir Francis a golden key as a memento of the occasion.



DESIGN FOR DISTRICT OFFICES—BY FRANK T. BAGGALLAY.

fire-places as possible. Indeed, the latter are only to be provided in the rooms of the officials, which will be quite shut off from the store rooms by iron doors. As far as possible, everything is fireproof, the floors and staircases being of iron and stone, the roof of iron, while the windows have stone mullions and iron lights. It is in no sense a case of locking the stable door after the steed is stolen, for there is no nation in the world whose records have suffered so little from fire as those of this country, and though it is only within comparatively recent years that they have been brought under one roof, having previously been scattered over various public offices, they are singularly complete from the date of the Norman Conquest to the present year. And not only are they safely stored, but preserved in such a way that they are readily obtainable by searchers, of whom many every day avail themselves of the opportunity of investigating facts which have long since become part of the forgotten history of the country. Musty files of papers are constantly being overhauled by students, historians, and others. To the casual visitor these possess no attraction, save exciting a passing feeling of wonder that they should be worth the expense of keeping at all. For the mere sightseer, however, there are contents of perennial interest. Foremost among these are, of course, the Domesday Books, which, somewhat singularly perhaps, have an even greater fascination for Americans than for English

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
23rd April, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

ARE Free Libraries equipped in technical information? Answers in the negative point to the preponderance of fiction, and to the devotion of an undue share of the public monies to that less substantial section of Literature. Imagination is all very well, they say, but we want concrete knowledge. The Science and Art Department appears to take this gloomy view. Grants to free libraries for the purchase of technical books having been made by some County Councils, correspondence has taken place between the London County Council and the Science and Art Department on the subject. While the Department says that such grants to free libraries are, under certain conditions, legitimate, it does not consider them advisable. Among the reasons it gives are "the unsatisfactory proportion of money spent at present by the Free Library Committees on educational literature," and "the consequent belief that the funds of the Technical Education Committee would be used to set free rate funds for the purpose of purchasing works of fiction, if not possibly even for the relief of the library rate."

THE excavations by the American School at the Heraion of Argos, in Greece, under the direction of Professor Waldstein, which were resumed this spring, have been very successful. Two hundred and fifty men have been employed on the work. Besides the two temples and five other buildings previously discovered, a large, well-preserved colonnade, 45 metres long, has now been found, twenty-five feet below the surface, south of the second temple. The discoveries include parts of metopes, two marble heads of the best Greek period, a hundred objects in bronze and gold, gems, vases, and terra cottas of the Homeric period, as well as numerous scarabs, several Mycenaean tombs, with Argive inscriptions on bronze, probably of a religious character. The excavations, which are now in the fourth season, will be completed this year. They rival the French excavations at Delphi in magnitude and importance, representing all the periods of Greek life from pre-historic to Roman epochs. They have given specimens of sculptures and architecture of the Periclean age, and have already produced more material for the history of the earliest Ceramic art than any excavations hitherto made.

WE are glad that success has so far attended the movement initiated a while ago by Mr. Dethridge, vestry clerk of Paddington, for doing fitting honour to the memory of Mrs. Sarah Siddons. Her last resting place in Paddington Old Churchyard—now transformed into a public garden—is

merely marked by a slab of cement with an inscription cut in its upper edge, and enclosed within unsightly iron railings. It is now contemplated not only to make this tomb worthy of the memory of Mrs. Siddons, but also to have a handsome marble statue in a prominent position on Paddington Green, facing the Harrow Road, and within a few yards of the grave. Besides the gifts of influential local residents and most of the surviving members of the Siddons and Kemble families, liberal contributions have been made towards the proposed memorial by the Duke of Westminster, the Dean of Hereford, Miss Ellen Terry, Lady Martin, Madame Antoinette Sterling, Mrs. Sarah Lane, Mr. H. Irving, Mr. S. B. Bancroft, Mr. J. L. Toole, Mr. J. Hare, Mr. A. W. Pinero, Mr. H. A. Jones, Mr. G. Alexander, and Mr. Augustin Daly. Up to the present Mr. Frank Dethridge, the honorary secretary and treasurer of the fund, has received about £150, but the committee which has been formed to carry the project to a successful issue hope that a much larger sum—essential to the due execution of their designs—will be finally forthcoming, and that thus, after the lapse of sixty-four years since her death and interment, a memorial befitting the genius of Mrs. Siddons will be erected.

FOLLOWING up our recent article upon the prevention of dry rot, we have made some inquiries as to what is known as the Haskin method of treating timber. The inventor, Colonel Samuel E. Haskin, contends that the mode now universally adopted of seasoning wood—by the extraction of the sap—is altogether wrong. The sap he regards as the life-blood of the wood, and to take it out is to ensure its destruction. The most effectual way to preserve the timber is to treat the sap within the pores of the wood in such a way that "the whole of its life-preserving properties are retained and solidified within the substance itself." The Colonel claims that by his method—practically vulcanising the wood—the Haskin process does in a few hours what Nature would take years to effect. It is, perhaps, needless to state that the Colonel is an American, seeing that the proofs of the excellence of the process are drawn from the United States, where, we are told, "vulcanised railway sleepers have had a thorough time-test, and so far as is known timber so treated will not rot." Examples of the vulcanised wood have been brought to England for inspection by Municipal and other authorities. If this method be reliable, great has been our sin of commission in the past!

THE Continental capitals and many other foreign cities of note would appear to be suffering from exhibition enterprise—a modern malady. There is, for instance, the approaching International Exhibition of Art in Venice, and Paris is well ahead with her plans for the Exposition of 1900. Of Russia's forthcoming exhibition we have given particulars, and Germany is also in the field. At the Industrial Exhibition, to be held in Berlin next year, the Colonial Section is to be made a specially prominent feature. The first main group will relate to the growth of the German colonies and the developments of their colonial commerce. In the second group, great numbers of the natives of different parts of Africa and Emperor William's Land, will be shown to the visitors. The small troupes of natives that have heretofore been exhibited in different places of amusement, will be totally overshadowed by these "exhibits." Exhibits is the official word—rightly or wrongly applied to human beings. As for the Paris Exhibition, it is to cost four millions sterling, and will cover an area of nearly two thousand acres, including the Champ de Mars and all the open ground

near it, the Esplanade des Invalides, the Trocadero, the Jardin de Paris, the present site of the Palais de l'Industrie, and all the quays between the Bridges of La Concorde and Jena. To prevent the crowding of any particular point, entrances will be numerous, and two of them will be monumental. The grandest will be in the Champs Elysées, where the Palais de l'Industrie now stands. This portal will open on the future avenue which, by means of an iron bridge, 325 feet by 360, is to connect the Esplanade des Invalides with the Cours-la-Reine. The parapets of this bridge are to be extremely light, and to imitate lacework, the object being to prevent the shutting out of the view of the Seine.

WHAT a terrible dearth of matter there is for our architectural contemporaries these two weeks past. What would happen if authors of papers, read before the various societies, were suddenly to be struck dumb can be ascertained by glancing at our friends over the way. One of them devotes *five pages* to a tabulated "retrospect" of Bath Stone with A B and C diagrams in full working order. Another devotes *six columns* to "Books Received," as far back as the 1893 Report of the Department of Public Works, New South Wales, and another gives *seven pages* of "British Museum," unblushingly. *The Architect*, humorously nicknamed the Advertising Mausoleum, is positively becoming a journalistic monstrosity. It has in its current issue less than 2,000 words of original comment.

ROSENEATH, which has been purchased by the Marquis of Lorne from the Duke of Argyll, is well known by name and description to readers of Sir Walter Scott's "Heart of Midlothian." It was here that the famous John, Duke of Argyll, familiarly styled "Ian Roy Cean," established the experimental farm which he put under the charge of douce David Deans; and here also the heroine of the tale, and her husband, the Rev. Reuben Butler, were settled. Scott refers to Roseneath again and again as an island, but this is a mistake. It really forms part of a peninsula, connected by a narrow neck of land with the rest of Dumbartonshire. This peninsula is washed on the eastern side by the Gare Loch, and on the western side by the waters of Loch Long, and its extremity juts out into the Firth of Clyde. Roseneath for a long period was an occasional residence of the Earls and Dukes of Argyll, who used it as a fishing and hunting lodge. The district is famed for the picturesque beauty of its scenery.

THE restoration of St. Giles's Church Tower, Newcastle-under-Lyme, was celebrated on the 13th inst., by the unveiling of a portrait of Mr. F. Stanier, of Peplow Hall Salop. Mr. Stanier recently restored the Tower at a cost of £5,000, and he has furnished the portrait to be placed with others on the walls of the belfry as a memento of the event. The Tower having stood for more than six hundred years, had fallen into decay, and Mr. Stanier, as a memorial to his ancestors, and out of veneration for the structure, decided to restore it to its ancient beauty. The operation has been carried out with careful regard to the preservation of the ancient work, and one or two modern additions which were incongruous and out of character have been removed, with the result that St. Giles's may now be regarded as possessing a high perfect specimen of a thirteenth-century Tower.

THE Leeds Waterworks Committee and City Council have been devoting much time to the proposal for a single ornamental fountain in some public place of the city. This is one of the things they do better in

France, for we take even our fountains sadly! We read, the other day, that the Paris Municipal Council voted a sum of £8,000 to restore and repair the monumental fountains which adorn their city. Paris has always been justly proud of her fountains, and among them are several which might be studied with advantage by the architect selected to design the work of which Leeds dares to indulge some reasonable hope. The story has its other side, however, for instead of being able to boast of a virtually unlimited supply of pure water, the Parisians are so anxious about the future that they are considering extensive schemes for the filtration of the river water. The last thing they would think of would be a diminution of the public fountains or a cutting off of the supply of water that feeds them.

ACCORDING to Board of Trade information, engineering and kindred trades continue to improve, the percentage of unemployed



A COTTAGE AT BROMLEY: FRANK T. BAGGALLAY, ARCHITECT.

members in unions connected with these trades at the end of March being 7·8 compared with 8·3 for February and 9·1 for March, 1894. Employment in the shipbuilding trades improved on the whole in March, and the percentage of unemployed members in unions making returns fell from 16·3 to 12·4, which compares with 13·3 per cent. in March, 1894. The building trades have resumed active operations, and the percentage of unemployed in unions making returns has fallen from 10·1 to 4·9, compared with 3·5 per cent. in March, 1894.

EXPERIMENTS in afforestation, recently made by Lord Rothschild, at Tring Park, are useful in showing what can be done by scientific planting. On the cold and sour soil of the Hertfordshire Hill Tops the owner of Tring Park planted larch, Douglas fir, and beech, but chiefly larch. His Lordship's agent on the Tring estate felled the larch trees off 700 poles of land a few years ago, and sold this timber by auction for £638, the buyers undertaking to fetch it away at their own cost. The plantation thus demolished had stood only for seventy-five years, but yet timber was remarkably well grown. Lord Rothschild is not by any means sure, however, that afforestation will pay. Timber may get cheaper, and in any case it is only worth while to plant such land as cannot be farmed. As things are, the annual thinning sale of his 400 acres of forest at Tring realises about £1,000.

THE primary schools in France give pupils an elementary acquaintance with art, which creates a demand later on for some kind of graphic supplement to the legends and facts of history absorbed at school. Then, too, local pride tends to foster the art instinct there as perhaps in no other country. A youth in any distant department or unimportant French town, who shows a peculiar aptitude for drawing and painting, is often encouraged and aided by a public purse to continue the cultivation of his gifts in the

art schools of Paris. As records of his progress there, and in recognition of this assistance, he sends home from time to time examples of his work, which become the property of his native place. You can come across paintings of superior quality in the museums of comparatively insignificant towns, and they often enough prove to be the productions of a local genius who, on the road to fame, has acknowledged municipal benefactions by perhaps a "success" from the Salon, or by the customary contribution expected of him by the authorities. Something might surely be done in this fashion for the encouragement of British art students.

ANOTHER instalment of Mr. Richmond's decorations at St. Paul's Cathedral was opened the other Sunday. It consists of the second saucer Dome, the subject being the creation of fishes. It is even richer in colour and more brilliant than the one unveiled last year. The pendentives are finished, as are also two more Clerestory windows, which are heavily-leaded and admit a subdued light. Figures of sibyls and temple builders fill up the intervening spaces. The final section of the Choir is now being undertaken.

THE miniatures, drawings, and paintings of Richard and Maria Cosway will form the principal feature of the Art Exhibition which is now held every year on behalf of certain East-end charities. The locale of the show will be the new house of Mr. John Gretton, in Ennismore Gardens. Contributions have been promised by many owners of valuable Cosways. All owners of these artists' pictures or miniatures who are willing to assist are invited to communicate with the Hon. Mrs. Lowther, at Lowther Lodge, Kensington Gore, who has undertaken the control of this section of the Exhibition. The Exhibition will be open from the 6th to the 10th of May.



LA MARIA BERGAMO, MAGGIORE: A SKETCH BY FRANK T. BAGGALLAY.

THE Holmenkollen Hotel, on the heights near Christiania, recently destroyed by fire, was an historic hostelry. Here the King entertained the Kaiser of Germany when, in 1890, the latter paid his State visit to the capital of Norway, and since then it has been visited by the Empress, as well as by the Princess of Wales and her daughters, and the Archduchess Stephanie of Austria. It was a favourite health resort, and was specially "Holmencolonised," as the English said, at Christmas, Easter, and Whitsuntide. The

greatest loss, however, has been the destruction of a most valuable and unique collection of Norwegian antiquities, including priceless tapestries which had been gathered together by the proprietor of the establishment.

In the Art World things seem to be looking up a little. Several important pictures that will be in the Academy next month have already been sold. Sir John Millais has disposed of his Moonlight pictures. Mr. Tate is the buyer, and so it will go to the collection he intends to give to the nation. Mr. Waterhouse's beautiful "St. Cecilia," rumoured to be one of the two or three great pictures of the year, has been sold. Mr. David Murray also comes within the fortunate few with one of his six-footers, and Mr. McWhirter, has also sold a landscape, Caledonian in subject. Mr. Tadema's "Love Token" will be an addition to the Duke of Westminster's collection.

THE Academy of Natural Sciences, Philadelphia, recently carried out an excavation of the Metzgar Indian Mound, on Deer Creek, Yellow Bud, Ohio, and found the skeleton of a man, who seems to have been a great chief, with copper ornaments and shell beads. The remarkable feature of the "find," however, was a "funeral tree," or log of cedar, about 18 ft. long and 5½ ft. in girth, which covered the skeleton at a depth of 10 ft. below the original level of the ground. Cedar saplings had been laid against the log to form a kind of tent above the body, and the whole had been covered with ashes and earth.

LIGHT railways appear to be "moving." The Duke of Westminster has decided upon constructing at Eaton a narrow-gauge railway similar to that on the estate of Mr. A. Percival Heywood, at Duffield Bank, near Derby. Mr. Heywood has undertaken, at the request of the Duke, to lay out the course of the intended line from Balderon sidings on the Great Western Railway, near Chester, to Eaton Hall, a distance of some three or four miles, also to superintend the laying down of the permanent way, and to construct a locomotive and waggons on the same principle as his own. On a fair calculation, the railway when completed, in about nine months' time, will allow of a 20,000 ton haulage per annum if worked anything like full time. The cost of the line, when fully equipped, will be about £1,200 per mile. A cable railway, 3¼ miles in length, has been constructed across country in Derbyshire by a private firm to the town of Derby, traversing the country from the village of Stanley and passing through the intervening parishes of Morley and Chaddesden. If 600 tons per day were carried it is estimated that the cost in labour, including repairs of the road, would not exceed 1d. per ton for the whole distance. This is one of the longest cable railroads in England.

DR. GARNETT says that the 3,000,000 entries in the British Museum catalogue represent something like 2,000,000 books. In 1838 there were only 450,000. The question of finding space is becoming a very serious one, though it is only a few years ago that by the simple contrivance of a sliding press, the accommodation was trebled without extending the space. Since the late sensible rules were introduced checking the issue of current fiction, Dr. Garnett thinks that at least nine-tenths of the readers use the reading-room for some legitimate object of study or reference.

MR. W. S. LOFTIE is the writer of the April number of the "Portfolio," which deals with the history of Whitehall, and is prefaced with a capital portrait of the man whose name is indelibly associated with the architecture of the district—Inigo Jones.

Mr. Loftie gives in detail all the historical facts obtainable about the Royal personages who have inhabited Whitehall, and satisfactorily settles the question why a hole was broken through the wall of the Banqueting Hall to allow Charles I. to reach the scaffold on which he was decapitated. The number is admirably illustrated with unaccomplished designs by Inigo Jones. Many other illustrations and several reproductions of old plans of Whitehall make the number of especial interest to architects and archaeologists.

ANOTHER volume of "The Studio"—the second—continues in excellence what was well begun. The papers are marked by breadth of view and a robust appreciation of many men and many styles. Much attention is given, not only to the work of individual artists, but to the trend of artistic impulse as shown in the schools and the exhibitions. Foreign art is generously entertained, as well as native art. Nor is any special leaning markedly shown to any particular tendency. The Letters from Artists to Artists afford opportunities for criticism. The illustrations are a little unequal in value.

THOSE interested by an Exhibition of Art Furniture, might have spent a fairly profitable time at the Agricultural Hall, Islington, last week. The exhibits covered the whole field of household furniture, appliances, and upholstery, ranging from nick-nacks in domestic ornamentation to such solid specimens of utility as improved sanitary baths and iron sofas. The various stands devoted to the newest fashions in sitting and bedroom furniture proved that there was no decline, but rather an increase in the taste for articles of Japanese design, especially for those of bamboo make.

THE ancient gateway, standing on the northern quay of Calais Harbour, which greets the tourist on his arrival from Dover, is about to be demolished. For nearly three centuries it has withstood the crumbling influence of time, and to this day stands as firmly as when it was built by Cardinal Richelieu in 1633. The old portcullis still shows its rusty teeth in the blackness of the slit at the top of the arch. In the place of this venerable monument of the power of the great Cardinal an avenue is to be laid out, forming a boulevard to that part of the town.

AN unusual scene was witnessed at the annual vestry meeting for the parish of Manchester, held in the Cathedral. A speaker, a worthy but somewhat "Low" Councillor, referred to a Reredos which has been placed in the Chancel of the Cathedral, and described it as an "ugly excrescence." Another said that the Reredos was both odious and idolatrous. An amendment, substituting "Low" for "High" men, was declared lost, but after a second count the Dean declared it carried. The announcement did not give satisfaction, and an attempt was made to arrive at the strength of the two parties by dividing them, for which purpose the Cathedral Aisles were used. This also was a failure. The Dean suggested as a compromise that one candidate from each side should be selected for the two vacancies out of the four names before the meeting. The mover of the amendment was willing, but the seconder remained obdurate, though he was appealed to by the Dean, "in the name of our common Master and for the sake of peace," to accept the compromise. Eventually the amendment was declared to be carried, and Mr. Alan Maclure, a "High" man, was thereby displaced. It is a pity the Reredos controversy cannot be settled by a little common sense. But we fear the matter has gone too far for compromise.

A LONDON correspondent writes:—"I learn from a private correspondent at Washington that the United States Navy Department has taken an important move towards the adoption of nickel steel for marine purposes. It has just been decided that the new boilers of the first-class cruiser *Chicago* should be constructed of this alloy, as the Carnegie Company had demonstrated that nickel steel was not only less subject to corrosion than pure steel, but would stand enormously greater tensile strain. It is long since this fact was demonstrated by Mr. James Riley, of Glasgow, but the price of nickel has hitherto stood in the way of extensive adoption. The price is, however, decreasing steadily with the greater use and production, and there is better prospect of extensive adoption. Moreover, only a small proportion of the alloy is nickel, and there is a great saving in weight, and therefore in first cost as well as in maintenance. The tensile strength of nickel steel boiler-plates is once-and-a-half more than that of pure steel, so that it would be possible in the *Chicago* to reduce the thickness by about a third, which will effect a great saving in weight for the same power, and this is a great consideration. The Steel Board or Committee of the Navy Bureau at Washington, too, have decided that the constructive department should adopt nickel steel in the new warships, and they quote Mr. Riley's results in their case."

RAPID progress is being made with the erection of the Pier Head Station, Liverpool, which is primarily designed to facilitate the conveyance of American passengers from the steamers to their destination, whether it be London or elsewhere. The work was started at the commencement of the year, and it is anticipated that it will be ready by the 1st of June, the time originally fixed, though the officials are sanguine that it may be opened for traffic a month earlier. The site is on the west side of the Prince's Dock. When finished the station will be about 800 feet long and some 85 feet wide—a lofty, well-lighted, and well ventilated structure, and will contain several waiting-rooms, lavatories, and all the equipments of a first-class railway station. There are some half dozen entrances to enable passengers to pass without delay from the Luggage Examination Offices to the station to their trains.

ONE by one the old taverns and posting inns are succumbing. The old Horse Shoe, Newington-causeway, has now been pulled down, and a new house put up on the site. A public-house has been there for upwards of 200 years, for a tavern token was issued from the house in 1667, when John Ives was probably the first landlord, as no building is shown there upon maps of an earlier period. The recent finds in the course of the necessary excavations consist of coins from the time of Charles II. to the present century, about twenty of them together in a small box. Further there are fragments of pottery and glass of the Roman time, a horse shoe, a tusk of the wild boar, a great quantity of bones of the horse; and, under the front of the old house, about six feet from the surface, there was a perfect skeleton of a man of great stature, and the burial seemed to have taken place a very long while ago. Among other finds were a well-made seventeenth century knife, some pottery of the Elizabethan and other periods, and tobacco pipes from the time of Charles I. The old inn seemed to have been once struck by lightning, for a portion of a meteoric stone was found embedded in the gravel. A good deal of interest was taken in the old Horse Shoe during the Wilkes and Liberty Riots in 1768, because William Allen, son of the then landlord, was pursued by a soldier into

the cowhouse at the bottom of the yard and shot. A picture of the incident has been engraved.

EDINBURGH is lit up by electricity for the first time. At a cost of about £120,000, the Corporation has laid down sufficient plant to illuminate 21½ miles of streets and the shops and houses of any consumers who may apply for light near the centre of the city. The generating plant includes engines of 1,620 horse power, and an equivalent set of dynamos of both high and low tension—for the distributing system adopted is the low-tension three-wire system. Prince's Street is to be lighted with arc lamps 50 yards apart, of 3,000 candles each. These, hung on artistic brackets over the northern causeway, will make undoubtedly a brilliant display. In all other streets the public lamps (175 in number) will be of 2,000 candles each. A difficulty peculiar to Edinburgh has had to be overcome in many streets. There are cellars under almost all the pavements, and these, as a rule, leave little space between their roofs and the flags for the laying of mains.

THE town of Abbeville, on the highroad between Boulogne and Amiens, was far better known to English travellers a generation ago. Though tourists who catch sight, from the railway, of the magnificent flamboyant west front of the great Church which Cardinal George d'Amboise began to build at the end of the fifteenth century, often determine to explore the old streets, the intention is seldom carried out. The valley of the Somme is not otherwise attractive, save to architects and students of history, who make it a starting-point for exploring the scene of the campaign of Cr cy. Abbeville is comparatively neglected both by Americans and our own countrymen. But the old home of the Counts of Ponthieu will, in the course of a few weeks, be the scene of a stirring and picturesque festival, one of a kind that is becoming less and less frequent in this country. On the 19th of May the town will be *en f te*, and thousands of visitors will doubtless pour in from the neighbouring towns and villages, attracted by a festival which will take the shape of a great historical calvacade. The history of the town will be represented by seven distinct spectacular processions illustrative of its principal episodes. The Gallo-Roman period will be the subject of the first group; then there will be the gathering of the Crusaders and their departure from Abbeville, with Godfrey of Bouillon as leader; the third group will include the more famous of the kings and princes who came to Abbeville during the Hundred Years' War; and there will be a special pageant representing the expulsion of the English from the town. The marriage of Louis XII. will be the sixth subject, after which there will be a long jump to the entry of Peter the Great into Abbeville; the hero of the last procession will be Admiral Courbet at the taking of Sontay.

THREE Egyptian tomb paintings given by the Committee of the Egypt Exploration Fund, have just been placed on exhibition in the Sculpture Gallery of the Egyptian Department, British Museum. One of these is a very fine specimen of the art of ancient Egypt. It represents a woman dressed in a long gown, open at the neck and reaching down to the feet. Around her neck is a large collar as was usually worn by officers of the Court, and persons of rank. Her hair, which hangs loose, is tied around the head with a fillet, the two ends of which hang down behind. The gown is painted green, but the face and neck a light yellow, this colour being the one usually used for women by the ancient Egyptians. The second sculpture represents four persons kneeling down, each within a kind of square,

and separated from one another. These figures are painted red upon a blue background. The third object depicts two men—one standing up, throwing seed over his back, while in front of him the other is busily engaged working up the ground with a hoe. These sculptures, which show us the art of the Twelfth Dynasty, come from the tombs at El Bersheh.

THE authorities responsible for roadside lands and village greens, need to furbish up their knowledge of what law there is in the matter, and as to this the "Dept." is about to refresh their tardy memory. A memorandum designed especially for Parish and District Councils, acquainting them with the powers they possess with regard to the preservation of roadside waste land, village greens, and recreation grounds, is being sent round, and here is the gist of the document: Where on either side of a public road strips of land exist open to the public, between the metalled road and the fences beyond, *prima facie* the public right of way extends, unless there is evidence to the contrary, over such strips or roadside wastes, and they cannot be lawfully enclosed by the owner of the adjoining land, or by the lord of the manor, or by any other person. Such strips may be of varying width, and the adjoining owner has no right to straighten the line of his fences by taking in any part of the roadside waste. It is not uncommonly believed that there is a right to enclose up to 15 feet from the centre of the road. This is not so. The public, unless it can be proved to the contrary, has the right to the whole of the roadside waste between the fences and the road. The fact that trees or shrubs have been allowed to grow up on these roadside wastes so as to interfere with their use by the public, does not necessarily destroy such right or justify their enclosure. As in the case of foot-paths, the County Council may proceed in instances where the waste has been encroached on before the Act of 1894. Village greens and recreation grounds are placed under the direct protection of the Parish Council or Meeting where the parish is too small to have an elected body. Where on any open land the inhabitants of a village or parish, from time immemorial, have been accustomed to play games, such custom practically constitutes the land a village green, and the inhabitants cannot lawfully be deprived, by enclosure or otherwise, of their right to use it. In such a case, where any attempt is made to injure the green or to interrupt its use as a place of exercise and recreation, the Parish Council may proceed against the person committing such act before the justices, and such person, if convicted, is liable to damages and penalties.

THE competition was smart at Tokenhouse Yard last week. For the usual small brick-and-mortar investments there was a capital demand, freeholds in Hackney changing hands at from eighteen to twenty-five years' purchase of the existing rentals. A few good City lots were on offer, but, although bidding was fairly active, very little business was done. The public market for West-end residences is still unsatisfactory, but important transactions continue to be effected daily by private contract. It was an unusually heavy week for stocks, shares, and reversionary interests. Although the auction season for large landed properties will not begin till late in the present month, when

the vast Somersetshire estate of Wrington will be brought to the hammer in Bristol, good business continues to be done by private treaty.

THE position of the engineering trades is more satisfactory than it has been for some time. The monthly returns issued by the Amalgamated Society of Engineers show a reduction of nearly 1 per cent. in the number of unemployed. A steady decrease in the number of unemployed members has been shown since the beginning of the year. The Steam Engine Makers' Society also reports a reduction of 1 per cent. in the number of unemployed members as compared with last month. The officials of the trade union organisations are looking forward to increasing activity in the near future.

BRICKMAKERS and tilers of Vienna, numbering between four and five thousand, went on strike on Wednesday morning for an advance of fifty per cent. in wages. The offer of the Kilns to raise the price of piece-work from fifteen to thirty per cent. was refused. This time last year a strike in the same trade resulted in an advance of twenty per cent., and subsequently an additional five per cent. The weekly wages of the brickmakers amount now to from thirty to thirty-six shillings, besides free dwellings in the houses belonging to the Company.

THE English colony in Rome has sustained a loss in the death of Dr. Edwin J. Miles,



HOME LOCH, ALLEN, IRELAND: LEONARD STOKES, ARCHITECT.

who acted for many years past as Honorary Secretary to the British and American Archaeological Society. Dr. Miles had found the Society in a languishing condition, and had really helped to infuse new life into it by his untiring zeal and unflinching courtesy and kindness in the discharge of his honorary duties. His funeral was the occasion for a display of sympathy and regret. England and America were represented by their respective Consuls, and among the many wreaths surrounding and covering the coffin was a large one tied with broad white ribbons, on which, in letters of gold, were inscribed the words, "The British and American Archaeological Society, to its devoted Honorary Secretary."

MAJOR CARDEW's report as to the circumstances connected with a series of explosions which occurred on Southwark Bridge was published on Wednesday. The inspector observes that the existence of numerous empty pipes in the system of mains laid by the City Electric Lighting Company greatly facilitates the passage of gas should it find access in considerable quantity at any point. This accident appears to suggest far more serious cause for anxiety than that which occurred in Cannon Street, and the most striking features are:—1. The distance to which it appears that a series of explosions may travel along the electric mains which form a gigantic network under the whole of the streets of the City; and (2) the proof it

affords of the insufficiency of any ordinary system of ventilation of pipes and street boxes. The report adds that the accumulation of gas should be prevented by thorough ventilation, by making the sides and bottoms of street boxes impervious to gas, and by filling up the boxes as far as possible with incombustible materials. So far the Electric Light Company had done very little towards carrying out these requirements. It must be admitted that in the case of the explosions on Southwark Bridge the main cause was the defect in the gas pipe, and it again directed attention to the very serious danger to the public arising from the condition of the gas pipes in many districts, a danger which was continually increasing, owing to the spread of the use of wood paving and other impervious surfaces, and which was temporarily intensified by every frost. He recommended that the Board of Trade should require the City of London Electric Lighting Company to at once take necessary measures to fully comply with the regulations imposed upon them for the protection of the public safety.

YET another case of petty or rural interference—rather more glaring than usual. At King's Heath, two builders, of Cotteridge, were summoned, at the instance of the King's Norton Rural District Council, for infringing the bye-laws, by constructing houses in the Midland Road, King's Norton, with bricks unfit for use. Mr. R. Godfrey (surveyor for the Council) said he inspected the buildings on April 2nd, and found that the bricks were not good. He had samples, and took them to the Selly Oak Workhouse, where the Council was holding a meeting, and the bricks, on being examined, were condemned. Mr. Pritchett, for the defence, said the case was of considerable importance to builders. The firm who had supplied the bricks was engaged in extensive building operations at Cotteridge, and for the bricks used to be con-

demned in that wholesale manner was a very serious matter. The builders had been given no opportunity to speak, and, therefore, they must have their say now. Mr. Pritchett called the manager of the firm who supplied the bricks, a Mr. Owen, architect, and several bricklayers, to prove that the bricks used in the buildings were sound and good; as well as the foreman of the bricklayers, who said that the samples had been taken from a heap of rejected bricks. The "case" was dismissed.

In the course of his report on the scheme for the construction of a road round the Scarborough Castle Hill, Mr. James Abernethy, the engineer recently engaged by the Scarborough Corporation, is generally in agreement with the report made by the late Sir John Coode some twelve years ago. He agrees that the work contemplated will prove of great advantage to the town, and approves generally of the direction of the proposed drive laid down by Sir John Coode. With regard to the ultimate cost of the proposed road and wall, he is of opinion that the sum of £70,000 is sufficient, including the cost of certain works on the face of the Castle Cliff. Mr. Abernethy holds that the proposed seawall will in no way prejudicially affect the tides and currents, neither will it render the entering or departing of vessels from the harbour more difficult. On the most important subject, as to the cause of landslips which take place from the Castle Cliff, and as to whether, in order to ensure the safety

of the proposed new road, it will be necessary to interfere with the face of the Cliff, Mr. Abernethy states:—"The base, or low portion of the cliff, is generally composed of clay shale, with occasional sandstone rock, the upper portion being of a harder character, mostly composed of sandstone rock and limestone, and therefore less subject to decay, overhangs in large masses, which might become detached at any moment. The main object in placing the intended wall so far from the base of the cliff was to avoid the danger from this cause, but I am of opinion that it would incur great risk to allow these masses to become detached of their own accord, after the drive is constructed, and I strongly recommend that steps should be taken in the first place to scarp down the face of the Castle Cliff. This should be carefully done by blasting and other means, under competent superintendence. The material removed from the face of the cliff can be utilised profitably for concrete and in filling up the space between its base and the proposed road, the construction of which, together with the removal of the projecting and overhanging portions of the cliff, would secure the future stability and safety of the proposed works."

THERE is much charm in Mr. Mallows' drawings of the House at Staplefield, which was erected by Mr. Frank T. Baggallay, some time ago, for a client making astronomy his hobby. The delightful house, entirely free as it is from the fidgetty effect of eccentric design, is beautifully situate on the west side of the Brighton Road, and has a fine Observatory in the grounds. The local bricks being of poor quality, the walls were rough cast, the modelling of the South Gable—so the architect generously informs us—being the work of Mr. J. E. Knox, the architectural carver. Including an Entrance Lodge and the Stables, the work cost just less than £5,000. The engraved block, from Mr. Baggallay's own wash-drawing, is of a Cottage in a fine position in Bromley Park, overlooking the valley to the west and south-west. The view shows the long stretch of roof, the bays of the principal sitting rooms, and the lantern which lights the staircase. The cost was about £1,200.

WITHIN two or three months the statue of the Queen, which is to be placed in the vestibule of the Royal Exchange, may be completed. The commission to execute the work was given to Mr. Thorneycroft, by the Corporation of the City of London, several years ago. The price agreed upon was 2,000 guineas, but no undertaking was given as to when the statue should be finished. The plaster cast was completed as far back as last October, and the work on the marble block has since been proceeding. The Royal Exchange, it may be re-called, was originally opened by Elizabeth in 1571. It was destroyed by the great fire in 1666, but afterwards rebuilt, only to be again burnt down in 1838, and the Queen opened the present building in 1844.

AN extension to the Blackburn Church of England Higher Grade School was commenced last week, Messrs. Stones and Gradwell being architects. The plans include a Schoolroom for mixed classes of 120 juniors, and a Schoolroom for 99 infants. These are to be well fitted up with separate cloakrooms, and the lavatories and usual conveniences are to be admirably arranged. A capital feature will be the covered march ground connected with the play ground, and the heating and ventilation of the whole building are to receive the most careful attention. The building is to be faced by parpoints, and the dressings are to be of Yorkshire stone. The work, the cost of which will be about £2,500, will be pushed forward with all possible speed.

The Builders' Journal.

MEN WHO BUILD.

NO. II.

MR. W. B. RICHMOND, A.R.A.



PROPHET in his own country! You remember the delightful series of lectures delivered some thirteen or fourteen years ago, by several artists of eminence, with the primary purpose of providing much-needed funds for the Society for the Preservation of Ancient Buildings. Mr. Richmond's lecture upon "Monumental Painting" gave you the greatest interest; and almost at the termination of the paper, he delivered this very trenchant remark:—"The influence of the sister arts (of Architecture, Sculpture and Painting) one upon the other must cease. Sculpture is to assert her independence of Architecture; she is to run loose of all constraint and to become, for a time at least, hopelessly imbecile. *Painting is to be picturesque not monumental; her ordered garments are to go in tatters; her serious demeanour is to be changed for the flush of lawless liberty.*" It is far longer back than fourteen years since Sculpture began to assert her independence. It would have been nearer to assert that the independence came from Architecture, who gradually dispensed with the affections of her younger sister, and then broke away entirely from her. Almost with painting, likewise. We have no privileges with monumental art. Our Churches are caves, as Mr. Richmond himself has remarked, or white-washed sepulchres, uncoloured, or if coloured at all, only in parts, patchily and with little general idea of design; and such designs as have been attempted, are formed, for the most part, after mechanical patterns and mechanical colours, under the uniform glitter of tile glazes. And, indeed, there is no hope, not even the semblance of a wish, that the demand for real decoration will arise

or the necessity for it in our Churches and public buildings ever become a part of public feeling. The dreary commonplace platitudes upon morbid or sentimental daily life are self-satisfying to the multitude of art lovers. The impossible forest glades with impossible lights, the boundless blue of the boundless sea, the unfortunate woman with a past, little bits of dog life, and the bloody unrealities of wars, are the deepest thoughts and aspirations of the present man.

Without the arts of Italy, we might be content; there would be no retrospect. In Italy we can discover how monumental



painting grew and under what conditions it flourished, and how the union between the sister arts produced all that is monumental in Italian painting. In the first place the architect, the sculptor, and the painter of Italy did not hold separate functions. All the three arts were in harmony, and in most instances combined in one man; but that man was not a member of a professional society, he was not a sanitary inspector, he was not even a city building speculator—he was merely an artist. Giotto, Brunelleschi,



BEAVOR LODGE: THE HOME OF W. B. RICHMOND, A.R.A.

Andrea Verrochio, Mantegna, Raphael, Leonardo da Vinci, and Michael Angelo, are names that recall masters in each separate sphere of the fortunate Arts. If all these men did not practise Architecture, Sculpture, and Painting, they were at least conversant with them, and were complete masters of their principles. That complete union of the three which existed—in Italy and Greece, at any rate, from the earliest times, each



A RECORDING ANGEL IN THE APSE OF ST PAUL'S :
W. B. RICHMOND, A.R.A.

having achieved the power of expression sufficient for a separate existence—led to the maturity of the noblest characteristics by the habit of mutual constraint, and wherever Architecture, Sculpture and Painting have remained hand in hand in unison, they have clearly defined the natural and philosophic limits of one another. This just limit of each Art, over which there must be no trespassing, was, in the purest times, perfectly understood and recognised. Architecture enriched her lines with Sculpture, her spaces with Painting. At the same time, both Sculpture and Painting were guided and constrained by the severity of contact with the austere lines, the mathematical proportions, and, above all, the conditions of lighting imposed upon both by Architecture. While it is the function of Sculpture to enliven and enrich, both with subject and ornament, the baldness of many architectural forms, no structure should be weakened thereby, nor should simple masses of unadorned space be encroached upon or broken up. The builder has taught the sculptor symmetry, proportion, construction, and restraint, and, as he becomes riotous and unregardful of simplicity, the sculptor follows him. Italian Sculpture and Painting of the twelfth century, and on even to the seventeenth, were all in unison. The three arts lived together in constant contact, and there has been no time whilst they remained acting in conjunction that a common influence failed them. By Architecture also has Painting been restrained. Think of the mere shell of St. Mark's! What can be simpler of construction? Yet every space is so inviting in form, so suggestive of decoration, that it seems constructed for the purpose. The windows are few, but the proportions are grandly simple, and suggest the employment of the brilliancy of gold, its glitter, and its reflecting qualities. The designs of the mosaics are masterpieces of decoration, and for colour are as perfect as any the World possesses. It was through St. Mark's that the great revival of the arts of Italy came

about; and if we would understand the principles of design that governed the art of Giotto—the outcome of Greek tradition grafted upon an Italian spirit—we must study the Greek Mosaics in Venice, in Ravenna, and in Rome.

Who knows all this better than W. B. Richmond? He has stood many times before the mosaics in St. Vitale, which the artists of Ravenna created in the 6th century, and before the figure of the Virgin in the Church of Torcello, "that mighty mother of awe-inspiring dignity and beauty." He has worshipped at the Shrine of Masaccio, who painted the frescoes in the Brancacci Chapel in 1428, with all their fulness and richness and harmony of colour, but in the monumental art of Giotto he discovered the foster mother of the art that followed in Italy. And so it is that to W. B. Richmond it has been given to initiate and to carry out the one great scheme of decoration England has for centuries attempted. Giotto, simplest of all men, was the beginner of the new Italian art which ended with Michael Angelo. The last echo of the voice of Giotto died away in the glorious vaults of the Sistine Chapel. What if our own Richmond is the modern Giotto, and our own glorious, noble Cathedral of St. Paul's the medium of his ambitions? Who said that at the birth of completeness the death knell of monumental art sounded? England has had no monumental art; but does it not now long for it? Why not nail

THE NEW ROMAN CATHOLIC CATHEDRAL.

THE preparation of the plans of the new Roman Catholic Cathedral, which is to be erected at Westminster, have been entrusted, as already announced, to Mr. J. H. Bentley. The style of architecture decided upon being the ancient Basilican, and no living architect in England having planned a Church in that style, it was decided that Mr. Bentley, before preparing his plans, should visit the Continent and inspect the Basilican Churches at Rome, Ravenna, and Florence. After an absence of several months, Mr. Bentley has returned to London, and now that Cardinal Vaughan is also back from Rome it is expected that the plan of the new Cathedral, of which the foundation-stone is to be laid on June 29th—the feast of St. Peter and St. Paul—will shortly take definite form. The site, a valuable freehold property of four and a half acres, on which once stood the Bridewell House of Correction, at Westminster, cost £55,000, and has since been valued at £300,000. In addition to the Cathedral there is to be built on the land a monastery large enough to accommodate thirty Benedictine monks and forty-five lay brethren, together with a Lecture Hall that will admit 2,000 people; while the Cathedral itself, which is to be 350 ft. long by 170 ft. wide, and inside 100 ft. high, will seat 8,000 and hold 10,000.



THE CARTOON OF CHRIST IN THE APSE OF ST. PAUL'S: W. B. RICHMOND, A.R.A.

the base insinuations of its callousness and spring Ambition into being? Painting has been picturesque, it may be monumental. Her ordered garments have gone in tatters; we will garb her anew. Her serious demeanour has changed for the flush of lawless liberty; but she is fretful and abashed; she longs at last for higher and for nobler things.

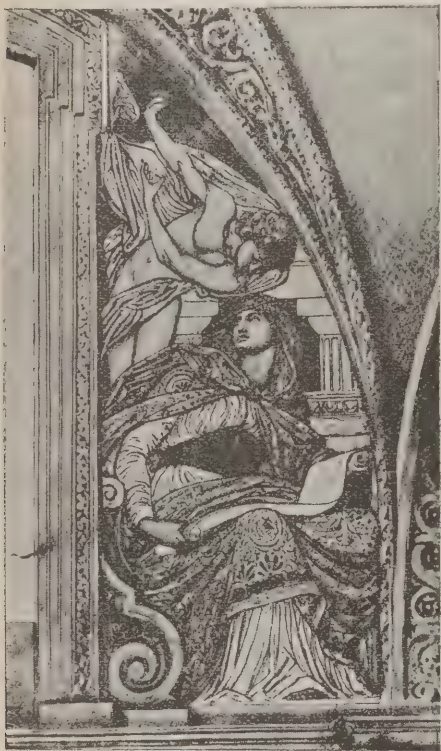
(To be continued.)

It is estimated that the construction of a road round the Scarborough Castle Hill would cost £70,000.

When these buildings are completed it is estimated that there will still be enough of the land left to yield, if let on building leases, sufficient funds to furnish an endowment for all the expenses connected with the Cathedral. The site, it may be added, is free from debt. Since Cardinal Manning's death the project has been pressed forward, and further substantial support has been received, a single subscriber giving nearly £20,000, and there is now enough money in hand or promised to justify the commencement of building operations, if not to complete the shell of the Cathedral.

"ARTS AND CRAFTS" AT MANCHESTER.

THERE is at present open in Manchester an "Arts and Crafts Exhibition" akin to what has been already held in London; but in addition there is a strong local reinforcement, and the dweller in Manchester who has the capacity to discern local talent worth encouraging and the means to encourage it will find it brought before him by this Exhibition as it has never been brought before. He will find, for instance, that the movement which is so strongly marked among the younger London architects for making the architect a



ANOTHER CARTOON IN THE APSE:
BY MR. RICHMOND, A.R.A.

designer and almost a craftsman as well as a master of "proportional lines" has taken stronger root in Manchester than he had thought, and that there is some excellent furniture in the Exhibition designed by young Manchester architects. He will also discover that at least one Manchester painter, in the person of Mr. F. W. Jackson, has had the sense to get away from the everlasting easel picture, and to paint a great decorative panel—almost as harmonious but less flat than a Puviss de Chavannes—of an old walled garden, which in the right kind of room would make a right noble and delectable frieze. He will also welcome the decisive bound to the front rank taken by so purely Lancashire an enterprise as "Pilkington's Tile and Pottery Company, Clifton, Manchester," whose tiles, whether designed by its artistic director, Mr. Joseph Burton, or by Mr. Leon Solon (the younger), Mr. John Chambers, or that always accomplished master, Mr. Lewis F. Day, are full of interest and charm. Another northern exhibit is that of the Luca della Robbia Company at Birkenhead. Yet it is true there is no Northern pottery to be compared to Mr. de Morgan's finest things, among which what may be called the "fish jar" in particular is a dream of strangeness and beauty. But then Mr. de Morgan is beyond question the first potter in Europe, without serious rival in either France or Germany. There are, too, the wonderful tapestries designed by Sir E. Burne-Jones and carried out by Mr. William Morris, among which the "Wise Men from the East," given to Manchester in memory of his mother by a donor who will be nameless, is the most beautiful and memorable. The mechanical methods of reproducing pictures, drawings, or photographs for book illustration are well illustrated, among them Mr. Crane's original designs for the menu of a well known restaurant, as well as the blocks

and impressions from them. The artist pleads in his preface to the catalogue for the union of "use and beauty in the surroundings of our daily lives," and this charmingly designed leaflet, printed in red on rough paper, shows that he can apply his theory with success to the commonest objects. Mr. Crane's designs to illustrate "The Two Gentlemen of Verona" and the "World's Fair" catalogue hang one above the other in the same room. The Birmingham Guild of Handicraft include in their interesting exhibit specimens of printing and wood engraving, and the art of printing, as it is understood by Mr. William Morris, is well illustrated by a complete set of the publications of the Kelmscott Press.

The Exhibition, which promises to be a pronounced success, will be continued well on into June.

PAINTERS IN WATER-COLOURS.

OPENING OF THE EXHIBITION YESTERDAY.

THE Royal Society of Painters in Water-colours opened its hundred and twenty-third summer exhibition yesterday, after a private view on Saturday. Various circumstances have conspired to prevent a considerable proportion of the members and associates from sending in any works, and, consequently, so far as regards the number of the drawings displayed this year, the exhibition falls short of some of its predecessors. There are, indeed, only 216 works, but in quality and interest they fully maintain the reputation of this old and somewhat exclusive society. There are drawings which show that the hands of the seniors have not lost their cunning. Mr. William Callow, for instance, contributes with a profusion indicative of great activity and vigour, despite his advancing years, and Mr. Birket Foster has several sketches, too. What is perhaps of even greater importance is the indication that the society includes in its membership younger men pushing to the front, well able to keep up its traditions, and to supply the places of those who are passing away. Mr. Thomas M. Rooke successfully attempts a daring and gorgeously-coloured imagination of the scene when Herodias danced before Herod; and of other compositions, "Bertuccio's Bride," by Edward R. Hughes, cannot but attract attention and elicit admiration. Mr. Herbert Marshall is up to date with scenes on the Thames when navigation was icebound by the late frost; while, on the contrary, Mr. A. W. Hunt's sketches of the Parthenon, by including the now happily demolished Italian tower, reveal that they must have been made some years ago. Mr. George Fripp's soft landscapes have a charm of their own, though many may prefer the larger brush and mistier lights of men like Mr. Eyre Walker. Mr. Albert Goodwin produces excellent effects—see his Lincoln, his Whitby, and his scene in Bristol Docks—with exceedingly simple material.

THE CAPE HOUSE OF MR. CECIL RHODES.

A THOUSAND acres on Table Mountain's charming slopes; a quaint old Cape Dutch residence stocked with all manner of interesting antique furniture and story-laden mementoes; an old garden filled with the odour of great beds of violets; a glen carpeted with hydrangeas in flower; a game preserve filled with South African antelopes and birds, with a lion-house for Zambesian forest kings; six miles of oak avenues, commanding vistas and views of sea and mountain gloriously picturesque wherever the eye ranges—all this, flooded with warmth and sunshine, under the cloudless blue by day and the moonlit sable by night! It is a fairly enticing picture which is given us by Cape Town accounts of Mr. Rhodes' residence. "Groote Schuur" is a typical old Cape Dutch house which Mr. Rhodes has

taken in hand with the lavish ideas and imaginative taste of a Monte Christo. He has bought up adjoining estates until he has a frontage of three miles of choicely wooded mountain side; and after enlarging the residence itself in correct style, has made it a perfect museum of old Cape Dutch furniture and curios, and relics from Mashonaland and Matabeleland, and many other places besides. A lover of the antique and a man who had not only taste and means but the power of seeing where he can specialise, Mr. Rhodes has spared no expense or trouble in procuring what is interesting and in character for the interior of his beautiful home. Dutch clocks, Dutch chairs and wardrobes, rich old tapestries, old prints and paintings, keep up the idea of "Groote Schuur" as a Cape Dutch residence; whilst of even greater interest are such relics as Lobengula's rifle, the silver elephant of Buluwayo, the Matabele King's seal and drinking cup, the sacred crocodile-bowl of Zimbabwe, bits of Arab glass from the ruins, blue pottery, and a Roman coin from Mashonaland, and photographs of the men who fell or who conquered in the late little war.

HISTORIC HOUSES TO BE LET.

WITH the approach of the London season there is a large increase in the number of interesting country houses to let. Two of the most historical in the market are Bisham Abbey, at Marlow, and Vale Royal, Lord Delamere's seat in Cheshire. The Abbey at Bisham was granted to the Templars in the reign of Stephen, converted into a priory in 1338 by the Earl of Salisbury, afterwards granted by Henry VIII. to Anne of Cleves, and later occupied by Elizabeth for three years prior to her accession to the throne. Vale Royal is part of the ancient convent to which additions were made by the Holcrofts. The great hall, 73 feet in length, is hung with armour and military weapons, and the windows contains the arms of several well-known Cheshire families. This house was honoured by a visit from Royalty, for the parish register contains the following entry: "A.D. 1617, the 21st day of August, the same day being Thursday, King James came to Vale Royal, and there kept his Court until Monday next after." Other houses for which tenants are being sought are Minster Acres, Northumberland; Dalham Hall, Newmarket; Pixton Park, West Somerset, which the Countess of Carnarvon vacates in June; Combermere Abbey, Viscount Combermere's fine place in Cheshire; and Hinton St. George, Earl Poulett's magnificent seat in Somerset. What is probably the first important sale of English landed Estate for the present year is the disposal to Mr. Ashley Dodd of the home portion of Colonel Leslie Toke's Godington Estate, near Ashford, in county of Kent. The estate has a distinctly defined pedigree from the time of the Conqueror, and in the interval has been in the hands of only four families, viz., the Godingtons, the Champneys, the Goldwells, and the Tokes.

The new stained-glass window which it is proposed to place in the parish Church of Billingborough, Lincolnshire, is estimated to cost about £250. It is intended to serve as a memorial to the late Duke of Clarence and Avondale, upon whom, had he lived, the right of presentation to the living, which now rests with the Queen, would have devolved.

ST. PETER'S CHURCH, Levenshulme, Manchester, is proposed to be furnished with an additional Mission Church. The proposed structure is for the Broom Lane portion of the parish, and efforts are to be made with a view of raising about £2,000, with which to defray the cost of erection and to liquidate a debt on the Mission Church of St. Mark.

THE WORK OF THE "GLASGOW SCHOOL."

FIVE years have elapsed since the work of the so-called "Glasgow School" of Painters, mustered in strength at the final Grosvenor Exhibition, challenged and secured the notice of the critics. Previous isolated specimens of it, seen on the walls of the New English Art Club and elsewhere, had excited passing interest and called forth comment, but it was only when Sir Coutts Lindsay made Glasgow Art the dominant feature of his last exhibition that the new movement forcibly arrested attention and established its claim to serious consideration. For occasional examples might have been and were passed over as mere ebullitions of more or less clever eccentricity, while this collective exhibition, by revealing the similarity of motive and common elements of strength that lurked behind the vigorous diversity of the Glasgow men, proved the possession of a distinct aim, and showed the movement (whatever its aim) to be a factor clearly demanding to be reckoned with in the contemporary development of British Art.

complex. The artists' own acknowledged preferences are for the work of the Barbizon School and that of the Dutch Romanticists, its offshoot, while amongst contemporaries the pre-eminent place of honour in their regard is given to Mr. Whistler. Precisely to what extent and in what manner the different members of the group have been influenced by these preferences is a subtle point of no great practical importance. In a broad sense the French romantic movement may be said to have given the impulse, while for the rest the particular suggestions afforded by the work of this master, and that, have doubtless been assimilated and adapted according to the natural bent of each artist's idiosyncrasy. The strongly marked individuality of each painter is not the least striking feature of the group, and it is this feature that makes the term "school" as applied to them inapplicable. For the Glasgow men have not created a school in the proper sense at all. They have certain ideals and working theories more or less in common, but beyond these the main bond of brotherhood is recognised in the common effort to attain the utmost freedom of expression. Such an aim,

"ON THE SUPPOSED SITE OF LONDON!"

A NOVELIST'S LITTLE JOKE.

AT the third annual meeting of the New Guinea Archæological Society, writes Dr. Conan Doyle, using his lively imagination to the uttermost, a paper was read upon recent researches on the supposed site of London, together with some observations upon hollow cylinders in use among the ancient Londoners. Several examples of these metallic cylinders or tubings were on exhibition in the hall, and were passed round for inspection among the audience. The learned lecturer prefaced his remarks by observing that on account of the enormous interval of time which separated them from the days when London was a flourishing city, it behoved them to be very guarded in any conclusion to which they might come as to the habits of the inhabitants. Recent research appeared to have satisfactorily established the fact that the date of the final fall of London was somewhat later than that of the erection of the Egyptian Pyramids. A large building had recently been unearthed near the



COTTAGE RESIDENCE, STAPLEFIELD, BY FRANK T. BAGGALLAY.

Since then the work of the "Glasgow School" has won recognition and distinguished honours on the Continent. Within the past twelve months, too, it has been made the subject of appreciative comment and exposition in several of the magazines. Perhaps a little of the laudation in the latter quarter might have been spared, for Glasgow Art, regarded as a whole, is yet in but a tentative stage, and is frequently disfigured by the faults and mistakes inseparable from experimental effort. But this much may safely be said, that no group of painters in our own time has given equal evidence of spontaneous vitality and the independence of attitude that springs therefrom—an independence, be it remarked, not always above the weakness of flouting conventionality for the sheer amusement of the thing,—and whether we regard the level of achievement already actually attained or the promise of future development contained in work so palpably inspired by honourable ideals, no "school" of recent origin has succeeded in making the same solid claim to the watchful and hopeful attention of connoisseurs. The circumstances and influences that have played a part in the evolution of the "Glasgow School" are manifold and

making for diversity rather than uniformity, is hardly the basis of a "school," although it may serve as a bond of affiliation. In noticing the work of the Glasgow men shown in the two principal Scottish exhibitions this year, priority of place may be given to the Royal Scottish Academy, not on the ground of the superior importance of the pictures it has secured, but because of the higher official status of that body—an official status which, unfortunately, it does not make much effort to justify. What distinction the Edinburgh exhibition enjoys is mainly due to the contributions from Glasgow, and this fact is officially recognised in the advantageous position accorded to most of the pictures sent from the West. Comparatively few of these pictures, however, are new, many of them having already seen the light of publicity in Glasgow—a circumstance worth mentioning incidentally, as showing the position the Scottish Academy really holds in the representation of Scottish Art. Although the contributions of the Glasgow men to the Royal Scottish Academy lack the interest that attaches to new works, they are yet, taken all in all, stronger and more representative than the examples to be seen this year in the Glasgow Institute.

dried-up bed of the River Thames, and there could be no question, from existing records, that this was the seat of the law-making council among the ancient Britons, or Anglicans, as they were sometimes called. Near this was an oblong building which had originally consisted of brick. Its name has been ascertained to be the Aquarium, which points to its having been used as a place of seclusion for habitual drunkards. The lecturer proceeded to point out that the bed of the Thames had been tunnelled under by a monarch named Brunel, who is supposed by some authorities to have succeeded Alfred the Great. The open spaces of London, he went on to remark, must have been far from safe, as the bones of lions, tigers, and other extinct forms of carnivora had been discovered in Regent's Park. Having briefly referred to the mysterious structures known as "pillar boxes," which are scattered thickly over the city, and which are either religious in their origin, or else may be taken as marking the tombs of Anglican chiefs, the lecturer passed on to the cylindrical piping.

REVISED plans have been prepared for a Hospital for the Clydebank and Renfrew Joint Hospital Board. The estimated cost is £7,000.

LIGHTHOUSES OF EUROPE AND AMERICA.

MR. EDWARD P. ADAMS, C.E., has written in *Cassier's Magazine* a series of illustrated papers on "Modern Lighthouse Service."

The oldest towers known, says the author, were built by the Lybians in Lower Egypt. They were temples also, and the light-keeper priests taught pilotage, hydrography, and navigation. The famous tower on the Isle of Pharos, at Alexandria, built about 285 B.C., is the first lighthouse of undoubted record. At Dover and Boulogne, on either side of the English Channel, were ancient lighthouses, built by the Romans. But the lighthouse at Coruña, Spain, built in the reign of Trajan, and reconstructed in 1634, is believed to be the oldest existing lighthouse. At the present time the lighthouse system of Western Europe leaves little to be desired. The new World has taken its lessons from the old, and welcomed commerce by its beacon lights.

The erection of Eddystone lighthouse at Plymouth, made a new era in the construction of such buildings. Bell Rock lighthouse, the next English lighthouse of a similar nature, is one hundred feet high, and was finished in 1810, at a cost of £60,000. The lighthouse on Sherryvore Rock, off the west coast of Scotland, which cost, with the harbour for the tender, £87,000, was first illuminated in 1844. Another of this nature is the lighthouse on Bishop Rock, off Scilly, one hundred and forty-five feet high, and cost £36,500. Wolf Rock lighthouse, off Land's End, Cornwall, is the latest great British work, and both in its structure and its illumination combines all the refined improvements. The foundation was commenced in March, 1862, and the lighthouse completed in July, 1869. In the first season only eighty-three hours of work could be done, and the whole time occupied in the building was equal to about one hundred and one working days. The cost was £62,725. The great distinction between the latter towers and their predecessors is that the stones of each course are dovetailed together laterally and vertically, so that the use of metal or wooden pins is needless. This method was first used at Hanois Rock, Guernsey.

On the coast of France many remarkable lighthouses have been built. At the present time, probably, the most complete system of lighthouses is possessed by that country. Cape de la Hève, near Havre, at the mouth of the Seine, is marked by two towers with lights of the first order. The first towers were constructed in 1777. The lighthouse of Walde is an example of a successful method used in sand or loose material. It is built upon screw piles, well braced, holding the lighthouse above the reach of the sea. This method was first used by Alexander Mitchell in the foundation of the English lighthouse on Maplin Sand at the mouth of the Thames. The lighthouse of Heaux de Bréhat was built about three miles from the most northerly end of Brittany on a partially submerged rock where the currents at times ran eight knots an hour. Still more difficult was the building of the foundation of the lighthouse of Ar-men, eight miles westward of the island of Sien, on the north-west coast of France. Commenced in 1867, it was not finished until 1881. At first the workmen, wearing life-belts, had to lay upon the rock "working with feverish activity, the waves constantly sweeping over them." This great work was planned by M. Leonce Reynaud, director of the lighthouse service of France.

One more European lighthouse well deserves mention, because it was the first lighthouse, erected at a long distance from land, which does not rest on a rock foundation. This lighthouse is Rothersand in the North Sea, Holland, near the mouth of the Weser. The history of its construction, which extended over seven years, from 1878 to 1885, of its first failure and final success, is exceedingly instructive. To build the foundation a caisson of boiler iron, thoroughly braced, was sunk in the sand to a depth of seventy-three feet below low water, then filled with concrete and masonry to about mean sea level. On this foundation was built a masonry tower with an iron shell, trumpet-shaped at the base, which is thirty-four feet

eight inches in diameter, and seventeen feet in diameter at the top, which is about one hundred feet above the water.

The early American colonists evidently saw the necessity for beacons to guide vessels to a safe anchorage. The first lighthouse in America was built at the entrance to Boston Harbour in 1715-16, at a cost of £2,285. Other colonies followed the example of Massachusetts. By Act of August 7th, 1789, the United States accepted possession of title to the lighthouses on the coast, and agreed to maintain them thereafter.

When these lights came into the possession of the United States, they were placed under the direction of the Secretary of the Treasury. As the result of investigation abroad and several reports to Congress, the Act of June 30th, 1852, was passed, by which the Lighthouse Board was organised as it now exists. In accordance with the provisions of this Act, the President appointed two officers of the navy of high rank, two engineer officers of the army, and two civilians of high scientific attainments, with an officer of the navy and an officer of the engineers of the army as secretaries, to constitute the United States Lighthouse Board. The board is attached to the office of the Secretary of the Treasury, who is its president, and under his superintendence it discharges all the administrative duties relating to the construction, illuminating, inspection, and superintendence of lighthouses, light-vessels, beacons, buoys, and other sea marks, the security of foundations of existing works, procuring illuminating and fog-signal apparatus, supplies and material of all kinds for building and rebuilding and keeping in repair buildings, vessels, and buoys of the United States. The members of the board receive no pay for their services, other than their regular pay in the army, navy or Civil Service. They, as well as all others in the lighthouse service, are prohibited from having any interests in any lighthouse contract.

ART AND SCIENCE AT RAMSGATE.

OPENING OF A LIBRARY AND TECHNICAL SCHOOL.

RAMSGATE is moving with the times, and has been vastly improved even during the last five years. That being so, let Ramsgate's programme have—in the very forefront—better railway stations, a better service of trains, and a town hall worthy of the name, says a spirited contributor to a daily contemporary. Meanwhile, a valued improvement has been added to Ramsgate in the institution of a free Public Library and Technical School. The Mayor and Corporation invited Mr. John Passmore Edwards down from London to formally open the building. Many things in Ramsgate are modest in character. The Town Hall is remarkably so; the market place which is beneath it, is in keeping. In like manner, the new Public Library and Technical Schools are unassuming in character. A large house which had been used as a school was secured and converted, plainly but without meanness, into rooms for readers of papers and magazines, a library for books, and class-rooms for the technical students. A green breadth of lawn at the back, and some little shrubbery are part and parcel of the new privileges which the public will from this day enjoy in Ramsgate. The history of the scheme is soon told. Ramsgate, in 1891, received a grant of £447 from the County Council as its share of the money voted to various urban authorities in Kent; technical classes were formed, and met in the Town Hall. The accommodation proving too small, rooms elsewhere were found. About six months ago, however, the house now secured was taken, and converted into the comfortable and creditable institution now open. The technical classes began with 140 students; there are now 350, and the art class has been especially successful.

ESTIMATES were submitted at the last meeting of the Dunfermline School Board for the erection of a School in the north-western part of the city, according to plans by Mr. Andrew Scobie, architect. The total cost was stated at £8,300.

A TRINITY HOUSE FIASCO.

OFFICIALS FUNK THE FASTNET.

SOME time since it was reported to the Irish Lighthouse Authorities that the stability of the Fastnet Lighthouse left a good deal to be desired. They, after making inquiry, brought the subject to the notice of the Board of Trade, and recommended that something should be done. The "something" involved an expenditure of £75,000. The suggestion was, as a matter of fact, pooh-poohed by the Board of Trade. Upon this the Irish Board of Lights hastened to declare that they ridded themselves of all responsibility in the matter. This attitude of theirs alarmed the Board of Trade, which now requested the Trinity House to investigate the condition of the Fastnet. As a result Mr. Matthews, the Engineer of the Trinity House, accompanied by Sir Leopold M'Clintock and Captain Vivian, went over to Ireland, and proceeded to the Fastnet in a steam yacht, accompanied by Mr. William Douglass, of the Irish Board of Lights. The Fastnet rises a hundred and eighty feet out of the sea. The Irish engineer, nothing daunted, landed on the Fastnet, and then looked to see his companions follow. It was a case with them, however. Mr. Matthews, the Trinity House engineer, and his two companions looked at the Fastnet and at the surf which beat about its feet, and liked not the prospect. So Mr. William Douglass, of the Irish Board of Lights, finding his patience exhausted, had himself slung back into the boat again. Then the whole party returned to the steam yacht, and afterwards went shorewards for safe shelter. Again, on the following day, they returned to the rock, but this time the Irish engineer declined to set an example of very ordinary courage, and his companions were not in a position to make any drafts upon their own supply. Consequently they once more came back into safe harbourage, and with the fixed determination not to attack the grim Fastnet again.

THE question of the erection of a Mortuary at Ilford, is under the consideration of the Urban District Council, which has also decided that plans and estimates be got out for building an Infectious Diseases Hospital on land in Cat's Lane.

THE work of constructing the Thorncliffe Tunnel on the new Midland Railway from Sheffield to Barnsley has had an abrupt stoppage. Through some cause Mr. Hallam, sub-contractor, has thrown up his contract, and the whole of the workmen in his employ have been paid off, and are thus thrown out of employment. Steps are being taken to secure an early resumption of work, and it is hoped this will be the case.

PUBLIC opinion in Edinburgh is strongly in favour of immediate steps being taken by the municipality to erect a statue of the late Professor Blackie, and it is anticipated that at an early date the details respecting the proposed memorial will be arranged at a meeting of the Town Council.

THE Irish military authorities have for some time past been contemplating the erection of a large barracks in Tullamore, capable of affording accommodation to two battalions of infantry. It is stated that the project has been decided upon, and that the necessary negotiations will be begun immediately.

THE ceremony of laying the foundation stones of the Primitive Methodist Chapel at Brownhills, Yorkshire, took place last week. The new Chapel will seat 565 worshippers, and the cost will be £1,200.

THE School Board recently invited six firms of architects practising in Bradford and Leeds to submit designs in competition for the proposed Schools at Highfield, Tong. The designs of Messrs. W. & J. B. Bailey, of Bradford and Keighley, have been selected.

THE Building Committee of the Bridgnorth and South Shropshire Infirmary has decided to accept the tender of Mr. R. Merton Hughes, contractor, Birmingham, for the sum of £4,368, for the erection of the new Infirmary, and operations have been commenced, in order to have the foundation stone laid on the 24th inst.

THE EARLY BUILDERS OF WHITEHALL.

A CONTROVERSY has sprung up with reference to what might almost be described as the pre-historic existence of a palace at Whitehall. Alluding to Mr. Loftie's historical description published in the April "Portfolio," Mr. Hurd, of Bristol, writes respecting the purchase of the district of Whitehall from a certain Roger de Ware and Maud, his mother, by Hubert de Burgh, between 1227 and 1243—this being the earliest date given by Mr. Loftie, of Whitehall. There is, he says, an earlier mention of it in the "History of Principality of Wales," by R. B., 1695. "About the year 800, Howel-Dha, Prince of Wales, built a palace for his own residence of white hurdles, or wattles, and therefore called White House or White Hall, if you please." Now this Howel-Dha was born 788, was made Bishop of Sales-brigg (Old Sarum) 824, Bishop of London 840, Bishop of Canterbury 844, and retired to Sarum, and became a monk, dying in 870, aged eighty-two. There is no record of whose son he was, but he may have been the son of the King of Powys, who was driven by Offa from his capital Pengwynn, the name being changed by Offa to Scrobs-byrggy (Shrewsbury) about, or rather after, 779. As Powys then owned by tribute to Offa the supremacy of Mercia, his son may have kept the title Prince of Wales, and was probably educated in London and built White Hall when a youth of eighteen or twenty. A few years after Offa's death, under his successor Ceuwulf, he seems to have claimed the title of King of Britain; and after Ceuwulf's death he became Bishop of Sarum, during the civil war in Beornwulf's reign. And when the latter was slain in battle in Wiltshire, Howel seems to have submitted to Egbert, and later on assisted him to repel the terrible invasions of the Northmen, the "Vikings," who came southwards up the Thames. This may have caused Howel to return to White Hall, his wattled palace, as a place for defence, and the Archbishop of Canterbury as well as the Cathedral being burned by the Vikings, Howel marched there, conquered them, rebuilt the Cathedral, and became Archbishop, till in his old age he returned to die in a monk's cell at Sarum. This Howel is often mixed up with Howel the Lawgiver of Abury, born 880, King of Abury 914, died of fever 940. The Welsh claim both these Howels, though they probably never set foot in Wales (unless Howel-Dha was born there). There is an allusion to Howel the Lawgiver of Abury in a small Welsh quarto in the British Museum, with an English translation. "Howel, the good King of Wales, a certain case extracte out of the ancient laws of Howel-Dha, King in the year nine hundred and fourteen" (There was no supremacy of the Welsh in Wales. At Abury he may have claimed his title). Can the name of Roger de Ware be derived from "D-ha"? If so, this Maud and Roger may have been relations of Howel-Dha, and the possession of Whitehall may have been kept in the family from the time of its erection.

Upon this, Mr. Phillips, C.E., of Putney, writes: "My attention has been called to Mr. Hurd's letter, quoting from a 'History of Principality of Wales,' by R.B., 1695, that 'about the year 800, Hoel-Dha, Prince of Wales, built a palace for his own residence of white hurdles, or wattles, and therefore called White House or Whitehall.' This palace is supposed to have been built where York House (called Whitehall), Westminster, formerly stood. There must be a mistake as to the site of the Whitehall in the quotation. If it was on Westminster Island at all in the year 800, it must have either been on the plateau of Thorney, Tothill, or the Neyt, as the remainder of the Island, until the year 965, was drowned every high water. Up to this date the area between Charing and the Mall in St. James's Park on the north, and Thorney and Tothill on the south, was a shallow lake, called Merfleet, at half-tide level; and where Whitehall and Privy-gardens are now, was a wide sand-bank from Merfleet effluent (near Charing) up the Thames along Merfleet to Thorney two feet above half-tide level, or about six feet below high water of spring tides. It is evident, therefore, that the palace could not have been

at Whitehall, Westminster, in the year 800, as stated, except, as I have said, it was on one of the plateaus. The low flat district now covered by Westminster and South Pimlico was originally an alluvial island, triangular in shape, and one square mile in area. During the decade from 960 to 970 it was embanked above high water from Charing to Chelsea, and the internal areas—Bulinga Fen and Merfleet—were drained through the embankment and converted into rich meadows. Then it was Merfleet, and the sandbanks there were filled up, nearly to the present levels, with two and a half million cubic yards of earth, excavated in forming the present plateau from Charing to the Green Park from east to west, and from the foot of the slope down from Piccadilly to the Mall in St. James's Park from north to south. After this was done the Thames frontage from Charing to Thorney, where Scotland Yard, Whitehall, and Privy Gardens are now, was occupied and built upon. The engineer who planned this great work was Archbishop Dunstan, and his engineer-assistants who superintended its execution were twelve engineer monks from Glastonbury."

Mr. Lloyd James writes from March: "I find in the letter of L. E. Hurd, a reference to Hoel-Dha (should be Howell-Dha) i.e., Howell the Good, and the probability of his having been educated in London, and of having built White Hall. It seems to me that the writer has confused the White Hall in London with another place. Howell the Good was son of Cadell ab Rhodri Mawr, i.e., of Cadell, the son of Rhodri the Great, and on the death of his father Howell, came into possession of South Wales and Powys 907; and became king of all Wales in 940, until his death in 948. He gathered a number of those well-versed in the ancient laws of Wales, at White House, now called Whiteland, a rising little place, and a station on the Great Western Railway, some 14 miles below Caermarthen, South Wales. He had this White House-on-the-Tave built as his residence, and here, as history records, he had the ancient laws classified, codified and made uniform. The names of those who assisted him are matters of history. There stands to this day a farmhouse called the White House, and, as said, on the very site of the one erected by Howell the Good. Howell-Dha having become a Bishop, is news to me, who have read most authorities on the history of Wales and Welshmen, both cleric and lay. Some Howell may have been Bishop of London for anything I know, but not Howell-Dha."

SAWDUST.

THE Foundation-stone of the New Primitive Methodist Chapel, at Brownhill, Yorks, was laid last week. The cost of the building will be £1,200.

It is stated that the Prince of Wales has consented to lay the Foundation-stone, in June next, of the new buildings to be erected by the Royal Medical Benevolent College.

THE re-opening of the Choir of the Bristol Cathedral, after a thorough restoration, under the direction of Mr. J. L. Pearson, R.A., is to be celebrated on May 5th.

A FIRE broke out in the timber yard of Harland & Woolff, shipbuilders, Belfast, on Tuesday night. The damage to the timber is estimated at £20,000.

MESSRS. J. WALDRAM & SON, of Buckingham Street, Adelphi, are the architects for the western block of the Workhouse in Poland Street, W., which is about to be rebuilt.

MR. STEVENSON CONSTABLE, M.A.I.A., a New York architect, has been appointed Superintendent of Buildings to the Town Council of New York, in succession to Mr. Brady, "removed."

FROM the designs of Mr. J. Mitchell Bottomley, of Leeds and Middlesbrough, All Saints' Church Schools, Pontefract, near Leeds, are about to be remodelled, and an Infants' School will be added.

THE Celtic Cross, which has been placed in the Church Cemetery at Bideford, over the grave of Mrs. C. C. Smith, is of Ballinasloe limestone, and was designed by Sir Arthur W. Blomfield, A.R.A.

THE foundations are being excavated in Winlatonbank, Blaydon-on-Tyne, for a new Roman Catholic School, to which a Chapel will hereafter be added. Mr. T. C. Nicholson, of Blaydon, is the Architect.

A Reuter telegram from Madrid, says:—According to intelligence received here from the Philippine Islands, the town of Tay Tay has been destroyed by fire. Two thousand houses were burned. One person was killed.

THE Annan Academy, Annan, is being warmed and ventilated by means of Shorland's patent Manchester grates and patent exhaust roof ventilators, the same being supplied by Messrs. E. H. Shorland & Brother, of Manchester.

THE new peal of tubular bells, which has been placed in the belfry of St. James's Church, Ashworth, near Heywood, at a cost of £150, was dedicated on Sunday last. The major portion of the cost has been defrayed by subscription.

SIR FRANCIS SHARPE POWELL, M.P., has formally opened and handed over to the borough of Wigan a boys' Reading Room in connection with the Free Library, which he has erected at his own expense, at a total cost for building and equipment of £3,600.

THE Embankment on the Bourne and Saxby branch of the Midland Railway has subsided several feet near to Wymondham, letting in a portion of the lofty bridge which spans the line at this place. Steps have been taken to prevent the collapse of the structure, but a portion of it will have to be rebuilt.

WHILE Sir Charles Dalrymple, M.P., was performing the ceremony of laying the Foundation-stone of the Parish Church, at Arbroath, a scaffold gave way and fell upon several persons. Great alarm prevailed, but fortunately no serious injuries were sustained. The ceremony was afterwards proceeded with.

HAVING viewed various sites for a generating station, the Electric Lighting Committee recommend the Hammersmith Vestry to treat for the purchase of two pieces of land abutting upon Fulham Palace Road, known as the Gardens Estate, belonging to Miss Yeldham and the Latymer Foundation, for the sum of £7,000.

A WELL-KNOWN Hackney landmark, Clapton Pond, is to be filled up and used for building purposes. The residents of Clapton have sent memorials to the local vestry declaring that "the destruction of the pond will depreciate the interest attached to this part of the parish of Hackney," and asking the Vestry to induce the freeholder to "make over this centre of local interest to the public."

ACCORDING to M. Akinfiel, the region of the Caucasus is drying up through the recession of the Caspian Sea, leaving bare tracts of sand, which the wind carries over the more fertile plains. During the last hundred years nearly 7,000 square miles of shore have been laid bare in this way. Owing to the movement of the sand it has been found necessary to protect the railway from Rostoff to Vladicavkaz by screens.

THE new Primitive Methodist Chapel, which has been erected at Masborough, Rotherham, was formally opened last week. The site is part of the old Independent College grounds, and situate in a densely populated neighbourhood. The new Chapel has cost about £2,300. It is built of brick, with stone dressings, and the roof is covered with Welsh slates. The design is English Renaissance, and the architects are Mr. Thomas Howdill and Mr. Charles B. Howdill, A.R.I.B.A., of Leeds.

NEW Baths have been built at Ilford, close to the River Roden, and near the high road, west of Barking Lane. The swimming bath is 60 feet long and 20 feet wide, with a varying depth of six feet to three feet. The bath is self-supplied from a spring underneath, which, it is estimated, will save £60 per year. There are dressing apartments for the accommodation of 39 persons, and a gallery for the use of spectators. The boiler is fed by a Penberthy injector from a well outside, and is supplied by the Rainbow Engineering Company. The building itself is of plain, substantial brick. There are also two cottages for the residential staff.

THE CRISIS IN THE BUILDING TRADE.

A POSSIBILITY OF SETTLEMENT.

IT is stated that there is reason to hope that better counsels will prevail between the masters and the employed in the building trade, and that a strike or lock-out will be averted. The masters are not unanimous in favour of the engagement of 1892, although there is no doubt a strong minority of them who would prefer a lock-out. On the other hand the employees, numbering upwards of 30,000, although well organised, have already suffered severely through the protracted winter and frost, and their levies have often been paid with considerable trouble. The great bone of contention is as to the proposal of the employers that piecework and sub-letting shall again be substituted. It is confidently expected that the Masters' Association will meet the men's delegates at a general conference before May 1. The Operative Bricklayers' Society has completed its ballot. It shows a large majority against accepting the new conditions of the employers, and in favour of maintaining the old working rules agreed upon in 1892.

A meeting of the delegates of the London Building Trades' Federation has also been held at the Bricklayers' Hall, London, to discuss the approaching termination of the Working Rules. The meeting sat for nearly seven hours, but the result of its deliberations was not made public, and the officials of the Federation refused to give any information, stating that the meeting decided that the proceedings were to be kept private. Other sources state, however, that the meeting decided unanimously to stand by the agreement of 1892, and that each union connected with the Federation should communicate this decision to the Central Association of Master Builders. The members of the London Building Trade Unions hold that no alteration whatever in the agreement should be submitted to. There is no intention to enter upon a general strike in London to secure the enforcement of the agreement, and master builders who continue to observe the agreement will be assisted by the Federation. The unions have been paying levies for the last six months. The following is a list of the constituent bodies of the London Building Trades' Federation, together with the number of their members who are in the London district and are affected by the present rules. The numbers are those at the close of the past year, but since then some of the unions have received accessions:—

Operative Bricklayers' Society	6,300
Amalgamated Society Carpenters and Joiners.....	6,000
General Union Carpenters and Joiners	3,100
Perseverance Society Carpenters and Joiners	550
Associated Carpenters and Joiners	473
National Association Operative Plasterers	2,750
Metropolitan Society Operative Plasterers	420
Amalgamated Society House Decorators and Painters	2,200
London and Counties Painters and Decorators	400
Affiliated Societies House Decorators and Painters	1,062
United Operative Plumbers' Association	1,012
Amalgamated Wood-cutting Machinists' Society	204
General Smiths', Fitters', &c., Trade Union	250
Window Sash Glaziers' Trade Union	80
Lathrenders' Trade Union	90
Building Trades Section, Electrical Trade Union	100
United Builders' Labourers Union	3,750
Navvies', Bricklayers' Labourers, and General Labourers' Union	3,500
General Labourers' Amalgamated Union	3,000
Building Trades Section, Gas Workers' and General Labourers' Union	1,500
United Orders of General Labourers	1,000
Building Trade Section, London and Counties Labour League.....	325
Amalgamated Plumbers' Mates' Society	500
	38,566

The Central Association of Master Builders has not yet decided what action it will take

on May 1 next. There is a strong minority in the Association in favour of locking out the union men, in order to secure the acceptance of the two new rules, providing for piece work and the abolition of disabilities, but whether this course will be taken is not yet decided.

The men demand the insertion of the following conditions as a preamble to the working rules:—(1) That no workman shall be placed under any disability by reason of being, or not being, a member of a Trade Society. (2) That no objection shall be raised to sub-letting work, provided these rules are observed. The federated unions are now voting upon the following questions:—(1) Are you in favour of accepting the above rules as additions to the present working rules? (2) Are you determined to stand by the working rules as agreed to in 1892?

MEETING OF LEEDS MASTER BUILDERS.

As the six months' notice from the operative carpenters and joiners of Leeds and District for an advance of wages expires with the present month, steps are being taken to bring about, if possible, conciliation. It will be remembered that at the beginning of November last, the Leeds Master Builders' Association received six months' notice from the carpenters and joiners of Leeds and District for an advance of wages from 8d. to 9d. per hour; also for various alterations of the working rules, to take effect at the beginning of May. On receiving this notice, the masters gave it due consideration, and came to the conclusion that the demand was exorbitant considering the state of trade. They therefore, in self-defence, sent a counter notice to the men to reduce wages from 8d. to 7½d. per hour, and to make alterations of minor points in the rules. It is stated that, although trade was bad, the masters would not have suggested any reduction had the men not made their demand at such a time. On Thursday afternoon a meeting of the Leeds Master Builders' Association was held in the Exchange Buildings for the purpose of considering what would be the most advisable course to adopt in view of the expiration of the notices on both sides. The meeting was attended by many of the largest employers, and after reviewing the situation they resolved to put themselves in communication with the men in order that a conference might be arranged, and, if possible, matters amicably settled. Unless this is done, it is to be feared that a strike is inevitable, and that nearly 1,000 carpenters and joiners will be directly affected, and a much larger number of those employed in other branches of the building trade, thrown out of work.

A SCHEME has been drawn up for the establishment of a County Museum for Lincolnshire. The sections suggested are geology, vertebrate zoology, entomology, conchology, botany, and the progress of man from the stone ages to the present time, and that there should be a library to illustrate the history, topography, and natural history of the county, with all the works of Lincolnshire men. To carry out such a scheme £25,000 would be required—£5,000 for the building and appliances and £20,000 for the endowment fund.

WHILE some workmen were engaged in levelling the flooring of Carey's Royal Cycle Riding School, 81, Euston road, London, they came upon a round tin box, buried under the boards of the riding circus, containing a large number of gold and silver coins, of the reign of Queen Elizabeth, and in a fine state of preservation. The find, it is understood, is valued at a large sum of money.

THE Edinburgh Corporation, at a cost of considerably over £100,000, has partially lighted the city with electricity. On the advice of Professor Kennedy (London), who acted as consulting engineer, two systems have been adopted, a low tension for streets and buildings adjacent to the station, and a high tension for the outlying districts of the city.

It is proposed to build a new Infant School in connection with the Presbyterian Church at Whalley Range at a cost of £1,500.

THE Board of Guardians intend to erect children's homes at Rothwell Haigh, Hunslet, at a cost of £7,000.

ARCHITECTURAL IRONWORK.

CHAPTER VIII.—IRON IN ROOFS.

IN treating now of ironwork as applied to the purposes of construction in roofs, it may be mentioned that it is in quite modern times that iron has been found to be a very serviceable material for the construction of roof-trusses for certain purposes. In speaking of the arrangements of the various parts and the stresses involved, it is necessary to first allude to the general principles observed in roof-trusses of wood.

The earliest dwellings, being constructed by men living in the warm dry climate of Central and Western Asia, had perfectly flat roofs. These were formed sufficiently secure to ward off the sun's rays and an occasional shower, and served as a resort during the cooler hours of the day, much as is the case in the East in the present day, but the climate of Europe requires inclined roofs, the better to resist heavy rains and snow, and the further westward in Europe we observe buildings, the greater shall we find the inclination, or "pitch" of the roofs.

The most simple plan of roofing an ordinary rectangular structure is to place stout rafters in pairs, with one end resting on the tops of opposite walls, and the upper extremities abutting at the top, or "ridge," to use the technical term. In such a roof as this, however, the covering, whether of tiles, slates, or whatever else may be employed, presses heavily upon the rafters, causing an inclination for their lower extremities to expand outwardly and push down the upper portions of the walls. In order to neutralise, or, at least, lessen this tendency, technically known as thrust, it is customary to connect the lower ends of each pair of rafters by means of a stout wooden member called a "tie-beam." Improvement in the framing of roof-trusses led to the addition of some other members, until finally we have a complete truss, or what is termed a "king post roof"—a very common form of English Architectural Woodwork. Coming now to the use of iron in timber roofs, as is well known in some roof-trusses iron is combined with wood, by which means far greater lightness is attained than when wood only is employed. An iron tie-rod, for example, may very advantageously replace the wooden tie-beam of which we have spoken. By screwing up the nuts the straining pieces are forced upwards, and being perpendicular to the principal rafters, they give support to them at their middle joints. When the tension rods are tightened, the tie-rod is also strained, and perfect stiffness is thus attained. The principals meet at the ridge, and the tension rods pass through them. The apex is covered by an iron plate, which is bent downwards so as to form a base for the nuts, which must be at right angles to the tension rods. The nuts are double in order to cause them to act upon a greater length of the rod than single ones would do.

(To be continued.)

THE Local Government Board of Mansfield has sanctioned the erection of vagrant wards at the Workhouse, the cost not to exceed £2,500.

THE Wesleyan Chapel in Charles street, Cardiff, was entirely destroyed by fire last week. The Chapel was the principal place of worship in the circuit, and accommodated nearly 1,000 persons.

PUBLIC offices are to be erected at Hunstanton on a site near the Golden Lion. Plans by Messrs. Skipper, architects of Norwich, have been accepted.

THE embankment on the Bourne and Saxby branch of the Midland Railway has subsided several feet near to Wymondham, letting in a portion of the lofty bridge which spans the line at this place. Steps have been taken to prevent the collapse of the structure, but a portion of it will have to be rebuilt.

THE ancient sallyport at Windsor Castle, which was discovered underneath Thames Street about forty years ago, is being connected with the Curfew Tower. The subterranean passage, whose finely pointed archwork and broad steps are composed of smoothly-chiselled chalk blocks, passes down inside the Castle wall and under Thames Street and the houses on the western side of the thoroughfare, in the direction of the river.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would in particular, desire to call our attention.

Housing under the Guinness Trust.—The annual report of the Guinness Trust for 1894 states that the capital as regards London now amounts to £260,642. The original sum given by the founder, Lord Iveagh, was £200,000, to which has been added £25,000 granted by the Goldsmiths' Company in 1893, and £35,642 net income from rents and investments. The buildings now contain 146 tenements on the Lever Street site, and 316 tenements in Vauxhall Square, which were opened at Midsummer. On Dec. 31, 1894, there were 5,135 persons living in the buildings held under the trust. The buildings now in course of erection on the Vauxhall Square site and also those in Page's Walk will be ready for occupation during the present year, and when these are completed the trustees will have provided 1,879 separate dwellings containing 3,746 rooms besides laundries, coster sheds, &c. With respect to the Dublin fund, which now amounts to £57,415, the sum of £7,415 arising from rents and investments has been added to Lord Iveagh's original donation of £50,000. The buildings on the Kevin Street site, which are similar in construction to those erected in London, were completed in January last, and they are now all fully let.

The Lighting of Edinburgh.—The Edinburgh Corporation, at a cost of considerably over £115,000, have partially lighted the city with electricity. The current was formally switched on last week by Lord Provost M'Donald's wife, and Prince's Street and adjoining thoroughfares became illuminated. On the advice of Professor Alexander B. W. Kennedy, of London, the consulting engineer, two systems have been adopted, a low tension for streets and buildings adjacent to the station, and a high tension for the outlying districts of the city. The central station has cost £18,000, exclusive of site and machinery, and has been erected under the supervision of Mr. Cooper, the burgh engineer. Mr. Monkhouse is the resident electrical engineer.

Brickmakers' Strike in Vienna.—They do things on a fine scale on the Continent. The brickmakers and tilers of Vienna, numbering between four and five thousand, went on strike on Wednesday morning for an advance of 50 per cent. in wages. The offer of the Kilns to raise the price of piecwork from 15 to 30 per cent. was refused. This time last year a strike in the same trade resulted in an advance of 20 per cent., and subsequently an additional 5 per cent. The weekly wages of the brickmakers amount now to from 30s. to 36s. sterling, besides free dwellings in the houses belonging to the company.

Beaton's Pocket Guide.—A dainty little booklet with limp leather covers and gilt edges, "Beaton's Pocket Technical Guide, Measurer and Estimator for the Building Trades" reaches us, and is just one of those invaluable little things that is always in the waistcoat pocket of men who build. The little guide consists of 200 pages, but there is no price attached. We wonder if Messrs. Crosby Lockwood, the publishers, give them away?

The Grand Jury of the county of Meath will shortly be petitioned on the subject of erecting a new Court House in the town of Navan.

SOCIETY MEETINGS.

Edinburgh Architectural Association.

—About 50 members of the association recently visited George Heriot's Hospital School under the leadership of Mr. Donald A. Gow, who pointed out its architectural features. The visitors afterwards proceeded to the Royal Hospital for Sick Children, in course of construction at Rillbank, where they were met by the architect, Mr. G. Washington Browne, A.R.S.A. Describing the plans of the hospital, Mr. Browne stated that the wards ran from east to west in order that they might have as much light and sun as possible. There were four large wards, each with 24 beds; one spare ward, and small wards for observation and isolation, providing in all for about 120 patients. The nursing staff was larger in a children's hospital than in one for adults, and there it would consist of five sisters, 21 day nurses, and eight night nurses. With resident doctors, matrons, &c., there would be a medical and nursing staff of 40. He described the accommodation for these, pointed out as a new feature in such buildings a play alcove for convalescent children, stated that the kitchen was on the top of the house, and that for 12 domestics who would be required there was a servants' hall. The cooking had to be done principally by gas. All through the building the ventilation had to be by natural and not mechanical means, and the heating in four sections, by low-pressure hot water in coils and pipes. The artificial light was to be electric, and for that they were laying down their own plant, with two boilers, engines, and dynamos. Either engine might be driven by either boiler, so that they were safeguarded from a breakdown of the light. After about half-past 10 o'clock at night the light would come from accumulators, so that there would be no machinery going at night. In any case the machinery was away from the building. There would be 404 lamps of 16 and eight candle-power. They were also laying down their own steam laundry in Sylvan Place. He explained the water supply, the materials used in the floors and walls, and other matters. In afterwards showing, on the various floors, how the plans had been realised, he drew attention to the absence of ornamental plaster work, and remarked that the hospital was constructed in a purely utilitarian spirit. The premises will be ready for occupation in August.

London and Middlesex Archæological Society.

—A meeting of this Society was recently held at the London Institute, Finsbury Circus. Mr. J. G. Waller, F.S.A., presided, and the Rev. Canon Benham, B.D., Rector of St. Edmund the King and Martyr, gave an address on "The Ancient Memorials of his Parish," in which he stated that the parishes of St. Edmund the King and St. Nicholas Acons formerly had two Churches, but both were destroyed in the Great Fire of 1666; that of St. Edmund's only was rebuilt, and since then the two parishes had run together. Mr. Herbert Jones, F.S.A., next read a paper on "Roman Remains recently found in Threadneedle Street."

Nottingham Architectural Society.

—At the twenty-second annual meeting of this Society, Mr. A. N. Bromley, F.R.I.B.A., occupied the chair. The council reported as to the business transacted in the year, and a statement of accounts was read. A ballot was taken for the election of president, vice-president, council, auditors, and secretary, when the following were elected:—Mr. John Howitt, F.R.I.B.A., president; Mr. A. N. Bromley, F.R.I.B.A., vice-president. Council: Mr. A. R. Calvert, Mr. A. H. Goodall, Mr. W. D. Pratt, Mr. H. Walker, F.R.I.B.A., and Mr. F. B. Lewis, A.R.I.B.A. Auditors: Mr. A. W. Brewitt, F.R.I.B.A., and Mr. John Sander, Hon. secretary and treasurer; Mr. A. Ernest Heazell.

Civil and Mechanical Engineers' Society.

—Mr. H. Coward read a paper on "Laundry Machinery" at the ordinary meeting of this Society, which was held on the 10th inst. The following members took part in the discussion which followed:—Mr. C. T. Walrond, A.M.Inst.C.E., the Honorary Secretary, Mr. E. H. G. Brewster, A.M.Inst.C.E., M.I.M.E., &c., Mr. E. Taylor, Mr. A. W. Ackermann, A.M.Inst.C.E., Mr. R. E. Phillips, A.M.Inst.C.E.,

CURRENT PRICES.

TIMBER.

K H B	4	× 11 1st & 2nd Yellow...	per Std.	£18	0	0
D O M	4	× 11 3rd	"	"	15	15
P B W	4	× 11 5th	"	"	9	15
S K B	4	× 9 1st & 2nd	"	"	15	15
P T W	4	× 9 3rd	"	"	13	10
↑ ↑ ↑	4	× 9 5th	"	"	10	0
M G & Co.	3	× 11 1st (Gromme) Yellow	"	"	14	10
N R A	3	× 11 2nd	"	"	14	10
D × M	3	× 11 5th	"	"	8	10
	3	× 9 1st Omega	"	"	16	10
B S 1st S C	3	× 9 1st	"	"	15	0
D D D	3	× 9 3rd	"	"	13	0
H A B	3	× 9 3rd	"	"	13	0
D M	3	× 9 4th	"	"	10	5
R S S	3	× 9 3rd	"	"	9	15
M F D	3	× 9 5th	"	"	9	0
***	3	× 9	"	"	7	10
W S N	3	× 9	"	"	5	0
S K B	3	× 8 1st	"	"	12	5
B A T	3	× 8 1st & 2nd	"	"	8	5
S K A	3	× 7 3rd	"	"	10	0
H A B	3	× 7	"	"	8	5
OB BOLA	2	× 9 1st	"	"	11	10
G & W	2	× 9 4th	"	"	10	0
H H H	2	× 8 u/s Yellow	"	"	8	0
	2	× 7	"	"	8	5
	2	× 6	"	"	7	10
	2	× 5	"	"	6	15
	2	× 4	"	"	8	0
	2	× 3	"	"	8	10
F R 1	3	× 11 1st White	"	"	10	10
* P *	3	× 11 2nd	"	"	8	0
E F 1	3	× 9 1st	"	"	9	5
J A S	3	× 9 2nd	"	"	7	15
	3	× 9 1st Spruce	"	"	10	0
	3	× 9 2nd	"	"	7	10
	3	× 9 3rd	"	"	6	15
	3	× 11 1st Pine	"	"	26	0
	3	× 11 2nd	"	"	17	10
	3	× 11 3rd	"	"	10	10
H & H	1 1/2	× 7 1st Yellow	per Sq.	0	14	0
D D D	1 1/2	× 7 3rd	"	"	0	13
S B S	1	× 7 1st	"	"	0	11
S A B	1	× 7 2nd	"	"	0	9
S-TERTIA	1	× 5 3rd	"	"	0	7
J F J	1/8	× 6 mixed Yellow	"	"	0	8
Oregon Pine	...	...	per Std.	£12	to	£15
Pitch Pine	...	...	per load	£11	to	£12 10s.
" fresh sawn	...	...	per load	40s.	to	52s.
Ash	...	...	per ft. sup.	34s.	to	52s.
Mahogany, Honduras (logs)	...	...	per ft. sup.	34s.	to	52s.
" (large & prime)	...	...	per ft. sup.	34s.	to	52s.
" Tabasco	...	...	per ft. sup.	34s.	to	52s.
" Panama	...	...	per ft. sup.	34s.	to	52s.
" African	...	...	per ft. sup.	34s.	to	52s.
" (large & prime)	...	...	per ft. sup.	34s.	to	52s.
" Cuba	...	...	per ft. sup.	34s.	to	52s.
Cedar, Cuba	...	...	per ft. sup.	34s.	to	52s.
" Mexican	...	...	per ft. sup.	34s.	to	52s.
Sequoia (clear)	...	...	per ft. cube	1s.	rod.	to 2s. 3d.
Birch Planks	...	...	per ft. cube	1s.	rod.	to 1s. 3d.
Beech Planks	...	...	per ft. cube	1s.	rod.	to 1s.

METALS.

Iron—Cleveland Pig	...	per ton	34s. 3d.	to	34s. 5d.
" Hematite	...	per ton	41s. 2d.	to	41s. 5d.
" Scotch Bar	...	per ton	£5 5s.		
" Best	...	per ton	£5 12s. 6d.		
" Extra Best	...	per ton	£6 7s. 6d.		
Yellow Metal Sheets	...	per lb.	4d.	to	4 1/2d.
Copper—British, Best Selected	...	per ton	£42 15s.	to	£43 5s.
Sheets, Strong	...	per ton	£42 10s.	to	£43
Australian Fine	...	per ton	£42 10s.	to	£43
Lead—Pig	...	per ton	£10 2s. 6d.	to	£10 3s. 6d.
" Sheet, English	...	per ton	£67 10s.	to	£68
Tin—English Ingots	...	per ton	£63 17s. 6d.	to	£64 7s. 6d.
Australian	...	per ton	£63 17s. 6d.	to	£64 7s. 6d.
Straits	...	per ton	£63 17s. 6d.	to	£64 7s. 6d.
Banca	...	per ton	£64 5s.	to	£64 10s.
Zinc—Sheet	...	per ton	£18 5s.		

A NEW Masonic Temple, erected and furnished by the Worshipful Master, Sir William Abdy, at a cost of £4,000, was recently opened and dedicated at Kelvedon, Essex, by the Earl of Warwick, Past Grand Master, assisted by Brother F. A. Philbrick, Q.C., and the Grand Officers of the province.

MR. J. WM. TROUNSON, F.R.S.B.A., F.S.I., Penzance, has been instructed to prepare plans for the alterations at, and additions to, the Penzance Wesleyan School Buildings. About £600 is proposed to be laid out in these buildings to meet the requirements of the Educational Department.

THIS evening Professor George Forbes, F.R.S., will deliver the first of a Course of Three Lectures at the Royal Institution on "Alternating and Interrupted Electric Currents." On Thursday, April 25, Professor Dewar, Fullerton Professor of Chemistry R. I., will begin a course of Four Lectures on "The Liquefaction of Gases," and on April 27, Mr. Arnold Dolmetsch will begin a course of Three Lectures on "Music and Musical Instruments of the Sixteenth, Seventeenth and Eighteenth Centuries" (with illustrations upon original instruments). The Friday Evening Meetings will be resumed on April 26, when Dr. John Hopkinson will deliver a lecture on "The Effects of Electric Currents in Iron on its Magnetisation."

The Builders' Journal

COMPETITIONS.

No. 2.—A Village Club House.

The Proprietors of the BUILDERS' JOURNAL invite drawings, in competition, from those under twenty-six years of age, for a Village Club House, on a corner site, 150 feet by 40 feet. The Club to contain a general room with a dais for the villagers, a reading room and library, a bowling alley, service bar, tea room, committee room, housekeeper's apartments, and three cubicles for public use. The necessary outbuildings must be provided. Cost not to exceed £2,000. Drawings to be delivered at Talbot House, Arundel Street, Strand, not later than Monday, the 6th May, 1895.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom is SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

THE Secretary of State for Foreign Affairs has received from her Majesty's Chargé d'Affaires at Madrid copy and translation of the particulars for tenders called for by the Spanish Government for six steam launches to carry Maxim guns. The launches are to be of 40 metric tons displacement, and the tenders will be opened on the 26th inst. at Madrid. The particulars can be seen at the Commercial Department of the Foreign Office, S.W., between the hours of eleven and six.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

"NORI."—Your letter shall appear next week.

To the Editor of "THE BUILDERS' JOURNAL."

DEAR MR. EDITOR,—In your kindly article of the 16th inst., the writer has, unintentionally, I am sure, been led into some inaccuracies, so likely to arise in recording one's recollections of an interview, and so I claim a little space in your journal to correct them, with your permission.

My remark in my letter as to my work lying "more in the past than in the present," referred particularly to such services as I had been able to render to the Institute, and more especially to the A.A., though my interest in both is as keen as ever; but as regards my own work, I hope the future is still before me.

I had the honour of twice acting as president of the A.A., and in that capacity having a seat on the Council of the Institute. The invitation to name fitting members for the Council (for its guidance in publishing their List) came to me—as to all—as a member, and not as in any way connected with the A.A.; and, on the spur of the moment, I wrote that I thought the A.A. should be represented, hardly dreaming it would be taken seriously. To my surprise I received a courteous letter, asking if I would stand for election, which I did, and was indeed proud of the honour done to the A.A. The Committee were not asked, as far as I know, until my successor filled the presidential chair.

At the interview I gave my views on the Examination question, and what I intended to convey was, that though in favour of examinations for admission to the Institute, believing them to be of great importance as an incentive to young men to qualify themselves in the many branches of their work, I yet felt that it was not possible to examine men in those particular qualities and gifts which make an architect, no more than we can in other callings in all that goes to make the man who rises above his fellows.

One other remark and I end my letter. "Sketch and measure, measure and sketch," was the dictum of William Burgess—not Fergusson.—I am, dear Mr. Editor, yours faithfully,

COLE A. ADAMS.

[The number of men who have presented themselves for examination shows that young architects of the present day are not adverse to the system, and is the best answer to the fears of those who deprecate the system and its effect upon Art. To believe that the study, necessary to pass, blunts a man's artistic faculties, we shall not believe, especially when we see the good work that so many of them turn out who have passed the examination. The fact that the plan of the preliminary, intermediate, and final examinations, had the cordial support of no less a man than the late Mr. G. E. Street, R.A., alone carries great weight.—ED. BUILDERS' JOURNAL.]

A SUPERB brass eagle lectern was unveiled in Manchester Cathedral on Easter Eve. It was presented to the Cathedral by Mr. Craven, in memory of a deceased brother.

APPLICATION has been made by the Town Council of Blackpool, for sanction to a loan of £1,750, to defray the cost of erecting a proposed branch Police Station at Queenstown.

KILSCANNEL Church, county Limerick, has been destroyed by fire. The fire is supposed to have been caused by the stove pipe which passed through the ceiling. Only the bare walls were left standing.

MR. J. WM. TROUNSON, F.S.I., of Penzance, has just laid his scheme for the Water Supply and Sewerage of Hea-moor District before the Madron Urban District Council, and the whole matter is to be forwarded to the Local Government Board forthwith.

It is reported in Paris, that the authorities intend to construct a second Morgue, the accommodation of the existing building having proved insufficient. The locality of the new building has not yet been decided upon.

THE new Church of All Saints', at Ringway, near Wilmslow, which has just been completed, stands on the site of the old building, and has been erected at a cost of £3,000 by the patron of the living—Lord Egerton of Tatton.

THE sanitary arrangements at the Hôtel Cimiez, Nice, where the Queen is at present residing, have been specially re-arranged on the latest improved principles, embracing Boyle's self-acting air-pump ventilators and other approved appliances.

A MEMORIAL having been handed to the Chairman of the Mexborough District Council, urging the desirability of holding a town's meeting, for the purpose of placing before the ratepayers the whole of the water question before the purchase is effected at a cost of £10,000, arrangements have been made for a meeting to take place this week.

By the draining of Lake Kopais Greece gains 60,000 acres of rich alluvial soil. The Greek Merchant Marine counts (1893) 116 steamers of 83,508 net tonnage, and 944 sailing vessels, aggregating a burden of some 250,000 tons. Much of the carrying trade of the Levant and nearly all of that on the Danube is in Greek bottoms.

At the monthly meeting of the Wakefield City Council, the Electric Lighting Committee recommended that tenders for electric lighting works should be obtained, and that application should be made to the Local Government Board for power to borrow £25,000 to defray the cost of the works. The recommendation was agreed to, and the works are to be carried out with as little delay as possible.

EFFORTS are being made for the erection of a new Church for the Hall Street district, Stockport. The late Mr. R. Bamford-Hesketh, of Gwyrch Castle, Abergele, promised a site for the Church, and £1,000 to the building fund, and this promise has been renewed by his widow, and will be supplemented by liberal contributions from the vicar of Stockport and others.

THE Duchess of Teck, on Wednesday, opened a bazaar in aid of the funds of the Derby Royal Infirmary. Her Majesty the Queen laid the foundation-stone of the structure in 1891, and it is now rapidly drawing to a completion, having been erected at a cost of £90,000, the whole of which has been subscribed by the town and county. It was opened free from debt, but it was found that a further sum of £4,000 would be required for the furnishing, and the Governors hit upon the idea of holding a bazaar for raising this sum.

THE Penzance Town Council having invited drawings for an Infectious Diseases Hospital to be erected at a cost of about £3,000, and offered premiums of thirty, twenty, and fifteen guineas, the following awards have now been made:—First premiated design, Mr. Hampden H. Pratt, architect, Rolls chambers, 89, Chancery lane, London, W.C.; second premiated design, Mr. F. Hunter Lines, 102, Darlington street, Wolverhampton; and third premiated design, Mr. F. E. Pearce Edwards, Liverpool, and Mr. Arnold Thornely, Birkdale.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ABERTILLERY (Mon.).—For the erection of school buildings, Queen-street, for the Aberystwith School Board. Mr. Geo. Rosser, architect, Victoria-buildings, Abercarn. Quantities by the architect:—

Davies, D.	£6.055	0	0
Jenkins, D.	5.950	0	0
Linton, John	5.700	0	0
Morgan, C. F.	5.636	0	0
Hatherley and Carr	5.395	0	0
Williams and Rogers	5.376	0	0
Jones, D. C., and Son	5.348	0	0
Wilkins, G. H.	5.240	0	0
Jenkins, John	4.915	0	0
Williams, A. P., Abertillery, Mon.*	4.840	0	0

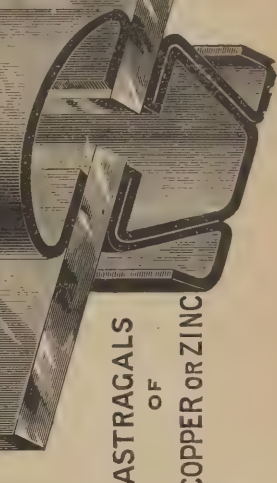
* Accepted.

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.



ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, **PETERBOROUGH**.
Brickworks and Railway Siding on Great Eastern Railway.

METAL
CASEMENTS of
every description.
GLASS ROOFING
Shelley & Co's & Hopes Patents

HENRY HOPE 55
LIONEL ST.
BIRMINGHAM
LONDON, 13 King-St
Cheapside.
MAN -
-CHESTER 8 Exchange
Arcade.

BARNLEY (Yorks).—For the erection of Salvation Army Barracks in Wellington-street, Barnley, for the Barnley Citadel Co., Limited. Mr. Alex. Gordon, M.S.A., 101, Queen Victoria-street, London, E.C., architect:—

Taylor, J. K., Barnley	...	£1,991	0	0
Smith, J. J., and Co., London	...	1,849	0	0
Clough, A., Barnley...	...	1,792	0	0
Gilder, E., Luton	...	1,720	0	0
Morgan, T., Wood Green	...	1,585	0	0
Rhodes Bros., Shipley	...	1,562	0	0
Burrows, H., and Son, Barnley	...	1,507	5	0
Turton, H. and F., Stairfoot, Barnley (accepted)	...	1,480	0	0

BRIDGNORTH.—For the erection of the Bridgnorth and South Shropshire Infirmary. Mr. Edward C. H. Maidman, 1, Coneyley Bank-avenue, Edinburgh, architect. Quantities by Mr. W. E. Davis, Falcon-court, 32, Fleet-street:—

A.				
Cave, G., Wolverhampton—	...	£5,927	0	0
Gough, H., Wolverhampton—	...	£150	0	0
5,770	0	0	143	0
Jones, J., and Son, Sedgely—	...	5,700	0	0
5,700	0	0	300	0
Willecock, H., and Co., Wolverhampton—	...	5,641	0	0
5,641	0	0	61	10
Treasure and Son, Shrewsbury—	...	5,535	0	0
5,535	0	0	20	0
Bowen, R., Leamington—	...	5,460	10	0
5,460	10	0	32	0
Bickerton and Maddocks, Shrewsbury—	...	5,300	0	0
5,300	0	0	32	0
Bate, W., Bridgnorth—	...	5,129	0	0
5,129	0	0	41	0
Thompson, R., Kidderminster—	...	5,100	0	0
5,100	0	0	160	0
Roper, A., Wellington, Salop—	...	5,082	0	0
5,082	0	0	99	15
Guest, J., and Son, Stourbridge—	...	4,540	0	0
4,540	0	0	147	0
Merton-Hughes, R., Birmingham (accepted)—	...	4,271	0	0
4,271	0	0	65	0
B.				
A. Brierley Hill facings, B. Edwards' Ruabon facings.	...	4,219	0	0

BOURNEMOUTH.—Accepted for making new roads, &c., on the Victoria Park Estate, for Mr. H. Joy. Messrs. Jennings and Goater, architects and surveyors, Bournemouth:—

Saunders, S.	...	£106	10	0
BOWES PARK.				
Accepted for alterations to Bowes Park Manor, for the Guardians, Parish of St. Mary, Islington. Mr. Wm. Smith, architect:—	...	£939	0	0

CHEARSLEY, near Thame.—For the erection of house and stables, for Mr. E. H. Vincent. Mr. W. F. Taylor, architect:—

Gibson, G. H., High Wycombe	...	£1,830	0	0
* Accepted.				

CREWE.—For the execution of road works, Bradfield-street, and others, for the Town Council. Mr. G. Eaton Shore, Borough Surveyor, Municipal Offices, Earle-street, Crewe:—

Hulse, A. and H., Winsford	...	£7,428	17	10
Lunt, Fredk., Crewe	...	7,205	8	11
Chesters, H., Crewe	...	5,533	8	7
Bennie, Fredk. L., Warrington*	...	4,191	4	2
Barke, Fredk., Stoke-on-Trent*	...	952	17	0

* The contract was divided between these contractors in the amounts named.

COWES, L.W.—For the erection of buildings for the West Cowes Steam Laundry Co. Mr. S. E. Tomkins, architect:—

Day, H. C.	...	£1,212	0	0
Barton Bros.	...	1,158	10	0
Tarrant	...	1,137	0	0
Thomas	...	1,097	0	0
Meador	...	1,094	0	0
Ball and Son (accepted)	...	1,089	0	0

[The machinery and fittings will be supplied and fixed by Messrs. Manlove, Allott and Co., Ltd., of London.]

EAST HAM.—For the erection of three houses in Coleridge-avenue, East Ham, for Mr. T. Forshaw, Mr. Charles E. Jackson, M.S.A., 11, Austin Friars, London, E.C., architect:—

Wilmott, F.	...	£1,279	0	0
Wells and Son	...	1,490	0	0
North, Stratford (accepted)	...	1,140	0	0

HIGHAM FERRERS (Northants).—For the erection of stores and Manager's house, for the Co-operative Society. Mr. H. Adnitt, architect, Harborough-road, Rushden. Quantities by the architect:—

Wilmott, T., Jun.	...	£960	0	0
Whittington and Tomlin.	...	950	0	0
Bayes, C., and Son	...	942	0	0
Berrill, H. C.	...	925	0	0
Mariott, R., Jun.	...	920	0	0
Swindall, T.	...	912	0	0
Whitbread, W. T.	...	895	0	0
Henson, F.	...	893	0	0
Johnson, F., and Son	...	855	0	0
Hackley Bros.	...	850	0	0
Sparrow, H., Rushden (accepted)	...	850	0	0

BARTER & CO

TILES MOSAIC FAIENCE Poole Dorset

HINCKLEY.—For addition to factory, Hinckley, for Messrs. Mureott and Goode, Messrs. Redfern and Haigh, architects 26, Millstone Lane, Leicester. Quantities by architects:—

Bentley, S. and E., Leicester	...	£3,785	0	0
Gethin, J., Shrewsbury	...	3,734	0	0
Wilson, J., Nuneaton	...	3,698	0	0
Wincott, A., Coventry	...	3,529	0	0
Woodward, S. B., Nuneaton	...	3,495	0	0
Jeffcote, A., Hinckley	...	3,460	0	0
Greaves and Farmer, Hinckley	...	3,365	0	0
Hewitt, G., Leicester	...	3,318	0	0
Moss and Son, Loughborough (recommended for acceptance)	...	3,265	0	0

LONGRIDGE.—For building the Cave Memorial Infant School, Berry Lane, Longridge. Mr. J. A. Seward, architect 16, Lune Street, Preston:—

Accepted tenders.

Almond, W., Longridge, Mason.	...	£662	0	0
Hesmondhalgh, E., Longridge, joiner.	...	374	0	0
Whittle, R., Longridge, Plasterer.	...	374	0	0
Bell, R., Longridge, Plumber.	...	335	10	0
Nickson, T., Preston, Slater.	...	487	0	0

LONDON.—For shop fronts and fittings to Nos. 82 and 84, High-street, Clapham, for Mr. A. C. Harrold. Mr. Edmd. J. Harrison, architect, 12, Compton-terrace, Highbury:—

Colls, Geo.	...	£662	0	0
Eddie, Robt.	...	573	0	0
Salter, Wm.	...	539	3	10
Mowate, J.	...	498	0	0
Lyne and Smith, Farringdon-street*	...	487	0	0

* Accepted.

LONDON, N.—For new shop-front and fittings to No. 22, Upper-street, Islington, for Mr. L. Jacobs. Mr. Edmund J. Harrison, 12, Compton-terrace, Highbury, architect:—

Vard and Lamb...	...	£417	0	0
Small, E.	...	397	0	0
Drew and Cadman...	...	374	0	0
Eddie, R.	...	335	10	0
Colls, G., Brunswick-place, N.*	...	330	0	0

* Accepted.

LONDON.—Accepted for new club house, Finchley Golf Club. Mr. Percy B. Tubbs, architect:—

Peck, C., Harringay	...	£215	0	0
---------------------	-----	------	---	---

LONDON.—Accepted for new laundry buildings, Workhouse, Cornwalis-road, Holloway, for the Guardians, Parish of St. Mary, Islington. Mr. Wm. Smith, architect:—

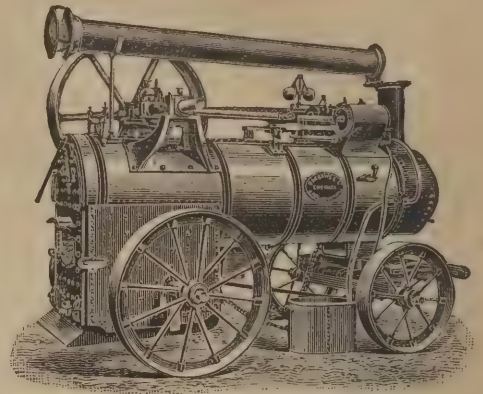
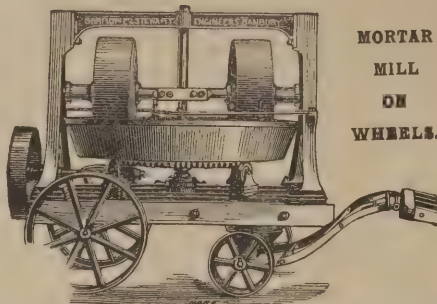
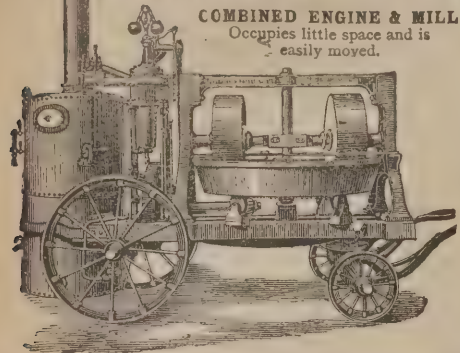
Peck, C., Harringay	...	£2,839	0	0
---------------------	-----	--------	---	---

NEWPORT (Mon.).—For carrying out an extension of the tramways from Kensington-place to the Cross Hands, for the Town Council, who supply rails, fish-plates, and bolts:—

Dick, Kerr, and Co., London	...	£2,643	0	0
Parfitt, A. E., Newport	...	2,430	0	0
Morgan, A. S., and Co., Newport	...	2,322	0	0
Krauss, A., Bristol (accepted)	...	2,168	0	0
Briggs, J., Hockley, Birmingham	...	2,137	6	8

[Engineer's estimate, £2,280. Mr. Krauss was the contractor for the laying and relaying of the whole of the Newport tramways.]

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

**SMOKEY CHIMNEYS & DEFECTIVE
VENTILATION.**

**THE
"DULCE DOMUM"
CHIMNEY TOPS & VENTILATORS**
(Downes' Patent).

The only Chimney Top which can be Easily Swept with the Ordinary Apparatus without being damaged. A Positive Preventative of Down-Draught, so Constructed that it Creates a Continuous and Powerful Up-Draught. Simple in Construction having No Movable Parts, Nothing to Oil or Repair. Cannot Get Out of Order. Strongly Made in Galvanised Iron. Once Fixed will Last for Years. Applicable also for Ventilating Public Buildings, &c.

Testimonials can be seen and prices obtained at the Patentee's Office.

**11, THE PARADE, Lewisham High Rd.,
New Cross, LONDON, S.E.**

Chimney Top.

Soil Pipe Ventilator

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,
59 & 60, CHANCERY LANE, LONDON, W.C.
N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

NEEDHAM.—For building schools, for the Barking School Board. Mr. J. S. Corder, architect, Wimborne House, Ipswich. Quantities by Mr. Walker, London:—

Rice, Elmswell	...	...	£3,700	0	0
Grayston, Ipswich	...	...	3,575	0	0
Death, Bildeston	...	...	3,498	13	6
West, Chelmsford	...	...	3,495	0	0
Parkington, Ipswich	...	...	3,483	0	0
Bennett, Ipswich	...	...	3,465	0	0
Girling, Ipswich	...	...	3,445	0	0
Gibbons, Crowfield	...	...	3,380	0	0
Youngs, Norwich	...	...	3,318	0	0
Chapman, Needham	...	...	2,943	16	0
Theobald, Needham (accepted)	...	...	2,861	0	0

PONTYPRIDD.—For building three shops, &c., Taff-street, Pontypridd, for Mr. Edgar Fennell. Mr. F. Gibson, architect, Midland Bank-buildings, Pontypridd:—

Powell, H., Pontypridd	...	...	£1,644	9	8
Williams and Co., Pontypridd	...	...	1,589	0	0
Lissaman, W., Chipping Campden	...	...	1,528	0	0
Richards, A., Pontypridd	...	...	1,500	0	0
Griffiths and Co., Pontypridd	...	...	1,492	3	9
William and James, Pontypridd	...	...	1,403	12	11
Morgan, H., Cardiff	...	...	1,382	0	0
Jones and Co., Gloucester	...	...	1,276	0	0
Richards, J. C., Pontypridd	...	...	1,235	0	0

* Accepted.

WIMBLEDON.—For construction of culverts, with man-holes, for the Wimbledon Urban District Council. Mr. C. H. Cooper, engineer:—

Iles, E., Mitcham	...	...	£1,172	0	0
Kavanagh, S., Kingston	...	...	1,133	8	2
Bell, G., Tottenham	...	...	1,094	0	0
Adams, T., Wood Green	...	...	1,060	0	0
Mayo and Co., Brixton	...	...	983	0	0
Cunliffe, W., Kingston (accepted)	...	...	978	4	0

RUSHDEN (Northants).—For the erection of general stores, bakery, stables, manager's house, &c., Wellingborough-road, for the Rushden Industrial Co-operative Society. Mr. H. Adnitt, architect, Harbouro-road, Rushden. Quantities by the architect:—

Hacksley, Bros.	...	...	£2,185	0	0
Marriott, R., jun.	...	...	2,015	0	0
Whitbread, W. T.	...	...	2,000	7	0
Sparrow, H.	...	...	1,950	0	0
Johnson, F., and Son	...	...	1,930	0	0
Bayes, C., and Son	...	...	1,919	0	0
Swindall, T.	...	...	1,877	0	0
Berrill, T. and C.	...	...	1,875	0	0
Whittington and Tomlin	...	...	1,860	0	0
Wilmott, T., jun., Rushden	...	...	1,825	0	0

* Accepted.

ST. WINNOW, CORNWALL.—For the erection of a Classroom, St. Winnow School. Mr. A. E. Skentelbery, architect, Lostwithiel:—

Wellington, J., Brigend	...	...	£176	0	0
Bassett, W. T., Lostwithiel	...	...	174	0	0
Oliver, N., St. Blazey (accepted)	...	...	169	0	0

CONTRACTS OPEN.

TO SANITARY ENGINEERS.

The Manchester Corporation invite TENDERS for PROVIDING and FIXING SANITARY FITTINGS in the Town Hall, Albert-square, Manchester.

Particulars and lithograph plans of the building may be obtained on application to Mr. T. de COURCY MEADE, City Surveyor, Town Hall, on deposit of £5, which will be returned on receipt of a bona-fide tender.

Tenders to be addressed to the Chairman of the Town Hall Committee, and delivered at the City Surveyor's Office, not later than FIVE p.m. on WEDNESDAY, the 8th May, 1895.

The Committee do not bind themselves to accept the lowest or any tender.

WM. HENRY TALBOT, Town Clerk.
Town Hall, Manchester,
April 9th, 1895.

TO SANITARY ENGINEERS.

The Manchester Corporation invite TENDERS for PROVIDING and FIXING RANGES of SANITARY FITTINGS in the various conveniences at Philips Park and Queen's Park, Manchester.

Particulars and lithograph plans of the Conveniences may be obtained on application to Mr. T. de COURCY MEADE, City Surveyor, Town Hall, on deposit of £2 2s., which will be returned on receipt of a bona-fide tender.

Tenders to be addressed to the Chairman of the Parks Committee, and delivered at the City Surveyor's Office, not later than FIVE p.m. on WEDNESDAY, the 8th of May, 1895.

The Committee do not bind themselves to accept the lowest or any tender.

WM. HENRY TALBOT, Town Clerk.
Town Hall, Manchester,
April 9th, 1895.

TO BUILDERS AND CONTRACTORS.

BEXLEY SCHOOL BOARD, KENT.

The above Board are prepared to receive TENDERS for the ERECTION of the Upland Board Schools, Mixed and Infant Departments.

Plans, specifications, and conditions of contract may be seen at the Offices of Mr. STAFFORD ELSMORE, Architect, of 13, Clifford's-inn, E.C., between the hours of TEN a.m. and FIVE p.m., and Saturdays to ONE p.m.

Bills of quantities with form of Tender may be obtained from the Architect upon payment of £2 2s., which will be returned on receipt of a bona-fide Tender.

No application for bills of quantities will be received after TWELVE o'clock noon on WEDNESDAY, APRIL 24th, 1895.

Tenders, upon the forms supplied, must be delivered to me sealed and endorsed not later than HALF-PAST SIX, MAY 2nd, 1895, and they will be opened and considered the same evening.

The party accepted will be required to enter into a bond for the due fulfilment of the Contract.

The Board do not bind themselves to accept the lowest or any Tender.

School Board Offices, WALTER J. WEAVING, Clerk.
Bexley Heath.

WESTMINSTER UNION.

TO BUILDERS AND CONTRACTORS.

The Guardians of the Westminster Union are desirous of receiving TENDERS for RE-BUILDING the WEST BLOCK of their Workhouse, in Poland-street, Oxford-street, London, W.

The plans and specification can be seen, and bills of quantities and forms of tender obtained, on application to Messrs. Jno. Waldram and Son, 13, Buckingham-street, Adelphi, W.C., the Engineers and Surveyors to the Guardians, on payment of the sum of £3 3s., which will be returned only on the receipt of a bona-fide tender.

No bills of quantities can be supplied after the 30th April, and the tenders must be delivered sealed at the Board-room of the Workhouse, not later than THREE p.m., on FRIDAY, the 10th day of May next.

The Guardians do not bind themselves to accept the lowest or any tender.

By Order,
JOSEPH BOND, Clerk.
Poland-street Workhouse, London, W.,
April 10th, 1895.

TO PAINTERS and OTHERS.

The Trustees of the Borough Market are prepared to receive TENDERS for REPAIRING and PAINTING the ROOF over the Covered Stands on the North side of the Borough Market, Southwark, S.E., in accordance with the specification prepared by Messrs. Henry Jarvis and Son, Architects, of 29, Trinity-square, Southwark, S.E., copy of which can be obtained on application to them, between the hours of TEN a.m. and FOUR p.m. on any week day.

The Tenders to be delivered to me at the Parochial Offices, Borough Market, S.E., on or before ELEVEN o'clock on FRIDAY, the 26th instant, when they will be opened.

The Trustees do not bind themselves to accept the lowest or any tender.

By order of the Trustees,
G. A. HOLDITCH, Clerk.

CONTRACTS FOR SUPPLY OF BUILDING MATERIALS TO DARTMOOR, PARK-HURST, and PORTLAND CONVICT PRISONS.

Persons desirous of TENDERING for the SUPPLY of TIMBER, DEALS, BRICKS, LIME, CEMENT, SAND, SLAB and ROOFING SLATES, &c., for "New Buildings," for the period ending March 31, 1898, are requested to send their tenders, prepaid, to the Directors of Convict Prisons, Home Office, Whitehall, S.W., on or before SATURDAY, MAY 4th, 1895, at noon.

Forms of tender can be had on application to this office, Prison Department, Home Office, S.W.
April, 1895.

TO BUILDERS.

The Town Council of Gravesend invite TENDERS for the ERECTION of MUNICIPAL OFFICES in the rear of the Town Hall, in accordance with drawings and specification prepared by Mr. A. G. SMITH, M.S.A., Architect, at whose Offices (No. 1, Darley-street, Gravesend), they can be inspected on and after MONDAY, APRIL 30th, during business hours.

Bills of quantities can be obtained of the Architect by any applicant on payment of a fee of Two Guineas returnable on receipt of a bona-fide Tender from the applicant, but the employer does not warrant their accuracy.

Tenders in sealed envelopes endorsed "Tenders for Offices," must be delivered at my Office in the Court House on or before MAY 14th.

The contractor must be prepared to execute the contract, and be bound by the general conditions which can be inspected as aforesaid, and to give security in the sum of £250.

The Council do not bind themselves to accept the lowest or any tender.

CHAS. E. HATTEN, Town Clerk.

SPINCTER WORKS, EMERSON STREET, LONDON, S.E.

**High Grade Flexible Hoses for
Contractors, Engineers, Builders.**

FIRE HOSES & HYDRANTS,
HOSES FOR CLEANSING WITH WATER POWER.

Pumping, Suction, & Dredging Hoses.

Always specify "SPHINX" Brand.

The Builders' Journal.

Vol. I., No. 12.

Tues., April 30, 1895.

ILLUSTRATIONS.

The Chapter House, Wells Cathedral :

 Sketched by C. E. Mallows 177
Llandaff Cathedral and Chapter House from S.E. 179
Old Homestead at Gomshall : Sketch by C. Irwin .. 181
Beauegency on Loire : a Sketch by Frank T. Baggallay 182
At Beauegency : by Frank T. Baggallay 183

In the Apse, St. Paul's 184
Angels of the Passion 185
Part of Design for one of the Saucer Domes : " Birds " 185
A Design in the Forthcoming Academy :
 W. B. Richmond, A.R.A. 186

CONTENTS.

An Ideal City 177
Averted—for a time 178
A Chance for London Architecture 178
The Institute and the A. A. 178
Lightning on a Monument 179
Restoring a Sun-Dial 179
Bricks and Mortar 180

Men who Build, No. II—

 Mr. W. B. Richmond, A.R.A. 184
Royal Institute of British Architects 186
Greek Locks 186
The Restored Crypt of St. Andrew's 187
New Chimes in the City 187
"The Relation of Painting to Architecture " 188

The Central Higher Schools, Sheffield 189
London and Paris 189
The Guildhall Pictures 189
Birmingham's New Hospital 190
The Sanitary Conference at Manchester .. 190
Trade and Commerce 191
Society Meetings 191
The Builders' Journal Competitions 192

The Builders' Journal.

An Ideal City.

SCIENCE, even sanitary science, can, now-a-days, indulge in ideals. Time was when Science was very cold-blooded and morose, looking at things under a perpetual cloud.

But, latterly, some sunshine and, we must admit, some sanitation, have crept in, and men like Moncure Conway are thereby encouraged to dream dreams. Sir W. B. Richardson is not a dreamer of dreams, but he has always been on the side of Hope, and we might add—soap! Sir Benjamin preached Sanitation in the days when it was an unsavoury subject. Twenty years ago he built up, in imagination, that famous city Hygeia, wherein, if a man was ill, it was his own mistake. At the closing meeting of the Sanitary Conference in Manchester, Sir B. W. Richardson referred to this City of his own designing. The years have done something in realisation, but there is yet much to do. Hygeia has sprung up everywhere—in parts only—and still the City destined to be immortal (in the Health Sense) does not exist. Human flesh (and Borough Surveyors) are very weak! But the "working model," taken to pieces, has been found pregnant of ideas, and many a town has benefited by a sewer here or a suggestion there, outcome of Richardson's science. At the Conference in Manchester the architect of "Hygeia" aired a very bold theory. The whole country, he said, was now surveyed, laid out, levelled and prepared with infinite toil and engineering skill in the network of railways which inter-

sected everywhere; it seemed to him they had nothing to do but to construct along the sides of all these great railways a series of iron or brickwork tubes, to start from every place where there were houses, and to let the sewage from those houses be pumped into the main by the side of the line and be collected and conveyed to spots of land selected for

is well known, be the stimulus of the country, properly applied, as Nature has a curious chemistry and filtration of her own; yet it is true that sewage is still the greater problem to a number of our large towns after its collection is completed, though Sewage Farms have undoubtedly been a step in Sir Benjamin's direction. He, at least, is an

enthusiast in the matter; he sees no more difficulty in the laying of railway conduits than in the setting down of telegraph poles. The conduits in the towns themselves need not be larger than the water tubes, and only simple motors would be required as the gradients (being railway gradients) would not be great. And what could be so carried away could be so brought in. Pure water, for instance. Thus a complete circulatory system could be set up; a kind of "arterial and venous" system, as Sir Benjamin described it. No one with any common sense, or knowledge of infectious diseases, now disputes the value of hospitals. Hospitals are immeasurably the surest safeguard against the spread of disease, and the private-house-system-of-being-ill (if we may so describe it) is rapidly becoming disapproved, though, like all traditions, it dies hard. Sir Benjamin's ideal is that "hotel-hospitals, comfortably, and even elegantly furnished, should be erected with everything necessary for the sick in any kind of disease. . . . Small hospitals could be placed on the tops of private houses, with lifts for taking the sick up into them." This sounds so new and novel that we should not be surprised if the patent grew well on the way! Finally, towns themselves should be ventilated. With this we quite agree. Compressed air, brought



THE CHAPTER HOUSE, WELLS CATHEDRAL : SKETCHED BY C. E. MALLOWS.

utilisation, so that the land might receive direct the benefits of sewage for the purposes of fertilisation. Is Sir W. B. Richardson going to be the Ideal Agriculturist also? For the incubus of town sanitation might, it

ing the sick up into them." This sounds so new and novel that we should not be surprised if the patent grew well on the way! Finally, towns themselves should be ventilated. With this we quite agree. Compressed air, brought

from the heights; proper courses for wind through the streets; footways, flowers, and gardens on the roofs of houses, roadways thereupon for foot passengers, not to say postmen; and a more favourable view of cremation, are all parts of Sir B. W. Richardson's Ideal City; together with a "dinner of herbs where love is," and water! But really, Sir Benjamin, we do not wish to live for ever, and we are just a little afraid that so ideal a city would be supremely dull. However, you may begin with London—scope like scheme, would then be big enough, and we can do with some "compressed air from the heights" at most seasons of the year.

Averted— for a time.

UNLESS some unforeseen circumstance arises, the Building Trade Strike is averted, for the time. On Thursday, the London Master Builders decided to continue the existing working rules pending the appointment of an arbitrator, to whom the disputed new rules and other matters should be referred, and that such arbitrator be appointed by the First of June. In other words, there is a month's breathing time gained, during which wiser counsels may prevail. Two documents, published last week—one a manifesto, the other a letter—were significant, bearing, as they did, upon the crisis. Mr. G. H. Trollope, President of the Central Association of London Master Builders, wrote denying the tintured statement that the masters sought to introduce a system of "sweating" or "piece-work." He gave a succinct account of the origin of the present working rules. Early in 1891, there were rumblings of approaching storm, and carpenters and joiners obtained a formulated code of rules for their particular trade. A year later the bricklayers failed to obtain a similar arrangement, but their discontent led to a general conference in June of 1892, resulting in a general set of rules for the whole trade. Mr. Trollope points out, and it is well known, that the employed endeavoured to compel employers to discharge Non-Union men, once this general set of rules was in vogue. To meet this, six months' notice for the termination of these rules was given, and a revised code was drawn up, dealing with the "Non-Union" difficulty, and with the further vexed question of sub-letting. The men have up to this moment refused to consider the new rules, and the rules of 1892 "end automatically" (as Mr. Trollope puts it) on May 1. "Piece-work," Mr. Trollope maintains, is not even a genuine bogie. The question has never been raised. The one point at issue is whether builders and trade leaders can arrange for the harmonious working of Union and Non-Union men. There is now the month of May—thanks to this extension of time—wherein to bring the opposing factions into co-workable silence instead of non-workable uproar. The manifesto to which we have referred is that issued by the Alliance Carpenters' and Joiners' Society—a "Free" Society (sounding of paradox) organised to fight the Building Trades' Federation. The manifesto states that in London at the present moment, out of 150,000 men connected with the building trade, only one-fifth are Unionists. Yet this insignificant minority has secured almost absolute control over the majority. The Non-Unionist is met, at every turn, by hindrance, molestation, and coercion; "take a Federation ticket or starve" is the tyrannical "mot d'ordre" when he endeavours to obtain work. Should he, however, join the Union, he quickly discovers that he has bartered his independence for a very miserable mess of pottage. From that moment, he must do as he is ordered; if directed to throw up good employment, with which he is perfectly satisfied, throw it up he must or life will not be worth living. The Alliance

proposes, therefore, to end this system by organising the majority to fight the minority with equal weapons. Set a thief to catch a thief was the old axiom. Shall we amend it so: Set a Society to catch a Society? If so, in this case we may even go so far as to believe one Society honest!

A Chance for London Architecture.

THE Old Cry of a New Street between Holborn and the Strand has been revived, and once again there would seem to be a possibility of Architecture having a look-in in London. But it is so old a cry that architects will be inclined to turn a deaf ear if only to keep their ambitions at rest. What is the good of dangling street-frontages before our eyes; frontages that may never be built? Yet the condition of the Strand this last month would have disgraced any city in the World—not American. We will back New York, any dirty day, for mud and misery. But the congestion of traffic, with the Embankment "up," has been absolutely critical to life and limb and a positive drain upon a man's pocket and patience, and if only to make ourselves happy in contemplation of the improbable, we welcome this old friend the New Street back again. He is something of a ghost; at any rate, he has no visible means of subsistence, but quite a number of clever people are interested in him, and give him the kicks and ha'pence that keep him alive. And so the County Council is to be "approached" (certainly the correct way of getting there!) in the matter, and St. Martin's Town Hall and its public men have resolved, with "much unanimity," to request the Council "to take immediate steps in proceeding with the construction of a new street from Holborn to the Strand. This meeting reminds the Council that the Council itself has frequently admitted the urgency of such a street; that public opinion has been often and widely expressed at public meetings, from which deputations have been sent to the Council; that the general Press of London has again and again urged the necessity for such a new street; that the chronic block existing through the congestion of traffic is injurious to trade and labour, dangerous to personal safety, and especially inconvenient to travellers passing between the northern and southern railway termini. Besides these reasons, a new street is urgently needed for the convenience of the whole Metropolis, there being no direct communication between North and South London." A "case" up to the hilt, if you like, and the only thing it seems to suffer from is an excess of conviction. But if only a broad street, or better still, a boulevard, could let in the light of average day between Holborn and the Strand, what a chance for Architecture and Architects, and even Sculptors, there might be! At present there is plenty of Art in the intervening district, but it happens to be so Realistic. Who is not disgusted with Drury Lane and Clare Market? All, at any rate, but the people who live there, and even they may be, for what we know, poor things—there is so much talk of Art reaching the masses, one never can tell. But Nature always seems to us uppermost in Clare Market.

THE new departments for girls and infants at the Abbeydale Board School were opened last week. The design of the building harmonises with the older buildings. The accommodation sanctioned by the Education Department is for 782 scholars. The contractor for the general work was Mr. John Greenwood. The asphaltting of yards has been done by Mr. John Hadfield, Ellesmere Road; the warming apparatus by Messrs. J. C. and J. S. Ellis. Mr. E. Cartwright has acted as clerk of the works, and the architect is Mr. C. J. Innocent, 17, George Street, Sheffield.

THE INSTITUTE AND THE A. A.

III.

BUT we ask, and again, Who is to start the restoration of the Institute? Mr. Penrose is not the man. He, like all that is best in the Councils at Conduit Street, is too little self-assertive. Alfred Waterhouse could do it if he would. In him are all the attributes, but the task wants the energy and, perhaps, a little of the impulsiveness of a younger man. It is hardly possible—lacking the individual—that the Council will initiate an action to condemn itself, but it might, if the majority has an atom of honest respect for the Institution left to it, appoint a committee of past presidents to sit in solemn conclave and report upon the subject. As well expect Father Thames to condemn his own waters as to expect this much! On all sides we hear whispers of advice. Many of the highest men in the profession have not hesitated to tell us boldly and frankly of the need of such things. We have letters from all quarters and from all creeds telling us—under the ban of privacy—how *this* would improve matters, and how *that* would advance the profession. And yet no movement comes. Everything appears to us to be sickled over with a fulsome cloak of indifference, under which is a fermenting mass of grumbling professionalism, that needs pricking into open revolt. We are sick of the flummery of this professionalism flaunted in the face of our young men. The other week an unsophisticated young gentleman addressed a communication to a professional contemporary, making a most terrible charge against a Fellow of the R.I.B.A. He was walking calmly home one evening, when—horror!—he discovered the name of a well known architect displayed upon a board attached to the scaffolding of a new building. The unsophisticated one did not quite faint, but he conveyed the intelligence—under a *nom de plume*—to the said contemporary. The communication appeared, and with it an unsophisticated editorial comment. That name on that board was also horrible to the unsophisticated conductor of that journal. The following week Mr. John Slater, B.A., F.R.I.B.A., unsophisticatingly announced that he had no knowledge of his name and his title to fame appearing in such a disgraceful manner, and had he known it he would, of course, have obliterated the wretched person who had so magnanimously violated the laws of Architectural professional etiquette. Again, an editorial foot-note, unsophisticated in its scathing denunciation of any motive so socially high a person as Mr. Slater could possibly have had in such a proceeding. A more sublime piece of "flummery" as this could not exist. Mr. Slater, who is a man we know to be above dishonourable actions, a man who has written good works, executed good works and delivered good works before the professional societies—a man known by all men to be a sterling good fellow—is tripped by the flummery of another dealer in this same produce of modern life. Mr. Slater had no backbone. He should have stood to his guns, and fought this fiend of professional immorality and unmasked him on the spot. Who laid down the law that to proudly place one's name upon one's work is against the etiquette of Art? Is it against the etiquette of Art or is it nothing but the flummery of which we have spoken? Why should not an Architect plant his name in front of his creations without calling down the attacks of the insidious? By what canon must he wait until he be dead for his name to be placarded upon his deeds? Short of advertising for work, he cannot err upon the demands of professional etiquette, else half of the successful practitioners of the day would be without it. And continue the argument to

our contemporary. Could finer flummery emanate from a man who has the good sense to deposit his journal in every pothouse in the purlieu of the City, "free, gratis, and for nuffink," as Mark Twain says, on condition that the proprietor sticks a blazing notice in his window that the such and such a thing is "taken in here." The whole business is a monstrous piece of hypocrisy, cankering the root of architectural practice. The name upon the board is innocent of any indecent motive. The architect is proud of his work as it grows piecemeal into existence, and if it be good in the eyes of men who see it, the name of the author is worthy of their knowledge. The journal in the pot-house, and the placard in the window is an honest means to an honest end, and if that is permissible by the etiquette of one artistic calling, by what sense is it unpermissible in another? For ourselves, we do not distribute the "BUILDERS' JOURNAL" in this manner, but even that may come, and in the meantime we advise every young man doing honest work, and precious little of it, to try and do more, by placing his name upon the front of his building, and give no heed to the knave who carves it upon a foundation stone and warns his fellows off elsewhere.

But in our efforts to wade through the waters of reform, we get deeper and deeper into the mud which lies at the bottom. We have a higher motive than the mere booming of ourselves and the raking in of the shekels of successful "trade" journalism. No one sees the imperfections of an Institute, like the Royal Institute of British Architects, so much as he who watches it from above, and hears the murmuring of the crowd below. Architecture is the noblest of all the arts, and the head of its administration should be as powerful as it is possible to make it. We have in the Architectural Association a body of earnest men, impossible of collection in any other country in Europe. The Association has done miracles in the advancement of Architecture, and the band of splendid fellows who have worked at it and in it for years, who have loved it and given up their leisure for it, and who, when they get beyond the circle of its influence still bear a magnetic attraction towards it, are worthy all the admiration it is possible to bestow upon them; but how much more should the Institute warrant such commendation! If it is impossible that reform should come from within, then it must come from without, and all those men, headed by Norman Shaw—whom, heaven knows, we appreciate to the full—who have remained callous so long, have no right to stand aloof from the rescue of their profession, while at its concentrated head in Conduit Street so much work is to be done. We want to see the Institute a power in the land and a power in commanding the respect of the multitude. We want to see true artists at its head—men who live and breathe and have their being in architecture. We want to see the Institute strike terror in the hearts of the ruffians of speculative building; and we want to see it consulted by the official fools, who have the making of architectural London and make it badly. If only funds be needed to lift these things into being, a good round sum from the proprietors of this Journal is at its disposal, and we dare swear, that from two of our rich contemporaries at least the same or a greater amount would be forthcoming. There is no desire to shirk the issue; we are not philanthropists at Talbot House. The long-haired gentlemen who chew Faber's pencils instead of American gum, have a room to themselves; they tread on Turkey carpets and write with jewelled pens—but the rest of us are just honest men, with the commercial spirit strong within us, and what is the most surprising of all things, have the decency to admit it.

LIGHTNING ON A MONUMENT.

A SERIES of very interesting experiments has been conducted by the Weather Bureau people upon the Washington Monument, which, standing 555 feet high in the centre of a flat, well-watered ground, constitutes a most dangerous exposure. It was struck by lightning on June 5th, 1885, which suggested that measures be taken for its safety, and a Committee of scientific men was appointed to investigate the subject. The report was in favour of erecting rods, and there are now four copper conductors running from the top of the Monument into a pit or well 15 feet below the bottom of the masonry foundation, in which there is permanently two feet and eight inches of water. They are also connected with each other by means of copper rods, and are studded at every five feet of their length with copper points three inches long, gold-plated and tipped

RESTORING A SUN-DIAL.

THE work of restoring and fixing the sun dial in the parish churchyard of S. Mary, Lancaster, has been completed, and the time-indicator is now in working order. The cost of the restoration has been defrayed by Mr. Fenton. The stonework has been re-erected by Mr. Warbrick, under the supervision of Messrs. Paley, Austin and Paley, and the dial is the work of Mr. Robert Atkinson, being a most interesting piece of work. In the centre of the dial, the latitude and longitude of the Parish Church are indicated, showing that the local time is 11 mins. 10 secs. after Greenwich mean time. Underneath is the Latin inscription:—"Sic umbra vertit sic vita fugit" ("As the shadow turns so life flies"). At each corner of the dial-plate is set forth the equation of the



LLANDAFF CATHEDRAL AND CHAPTER HOUSE, FROM THE SOUTH-EAST,
SKETCHED BY C. E. MALLOWS.

with platinum. Since that protection was placed upon the Monument it has not suffered any damage, although the lightning plays around it every time there is a thunderstorm. During the summer season Professor McArdie, the lightning sharp of the Weather Bureau, has a camera constantly trained upon it so as to make negatives of the flashes as they occur. A second camera at Fort Myer, a signal-service station on the Virginia side of the Potomac, and a third on the roof of the house wing of the Capitol, are used for a similar purpose. The distance between each of the cameras and the Monument has been accurately ascertained, and the photographs are used for the purpose of determining the true direction of the flashes and measuring their intensity and velocity. The direction of the flash can be determined by the photographs taken from the three points of view, and the measurements are made by triangulation.

time table for all the months of the year showing when the sun is behind the clock and when it is before. This will enable the observer to work out the correct time at a glance. The dial-plate, which is of brass, is constructed in two pieces, the better to secure accuracy of adjustment. A square of brass drops into the stone pillar, and the dial proper, which has a circular edge, fits into the other part, and the exact position is thus easily secured. The gnomon is made particularly strong, and cannot be broken except by someone determined to do so.

MESSRS. WALTON & LEE, of Mount Street, Grosvenor Square, have sold to Mr. Ashley Dodd the home portion of Colonel Leslie Toke's Godinton estate, near Ashford, Kent. The price closely approaches £50,000.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
30th April, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

It would appear, from certain indications, that some alterations are proposed to be made to the front of the National Gallery. A short time ago, holes were dug in the raised forecourt, and unsightly heaps of rubbish left exposed. Later on, the paving and the curb of the railing enclosing the forecourt were marked in lots as if in preparation of a sale by auction. It is important that no alteration should be made in the aspect of the building without mature consideration, and it is to be hoped that some member of Parliament will obtain an assurance from the First Commissioner of Works that nothing will be done which will prejudicially affect the design of the front. In spite of considerable detraction, Wilkins' design has a merit of its own, and a certain charm and refinement which we can ill afford to see weakened or obliterated.

TOGETHER with a few remembered oil paintings that have been at the Royal Academy, Mr. Stacy Marks is showing, in one of the rooms at the Fine Art Society, a number of recent water-colour drawings. These are, of course, of birds, and for the most part they are of the parrot tribe; a family with whose plumage, whether of the flakey whiteness of cockatoos or the gorgeous raiment of macaws, he is so familiar. Nor is it only with the outward seeming of these and other birds that the artist is thoroughly at home. He knows their tempers and their ways very intimately, nor has he upon this occasion exaggerated those characteristics which bear a humorous likeness to human nature.

THE old proposal to extend Chelsea Embankment is to be renewed. At the next meeting of the County Council a deputation will be introduced by Earl Cadogan and Mr. Whitmore, M.P., with a view of urging upon the Council the reconsideration of the subject. It is estimated that to extend the Embankment from the new Chelsea Bridge to the Kensington Vestry Wharf, a distance of 400 yards, would cost £64,000. Towards this the Vestry are willing to contribute £8,000, but the late County Council declined to entertain the project unless the Vestry would contribute £21,000.

UNUSUAL interest attaches to the operations of the Silchester Excavation Committee, who have unearthed, for the first time, the workshops of Roman dyers in Britain. By permission of the Council of the Society of Antiquaries, an Exhibition is being held in Burlington House, of the various objects of interest brought to light by the excavations. Plans and drawings are also exhibited. The

Exhibition represents the results of the excavations of the fifth season, which were begun last April, and continued, with the usual break during harvesting operations, until October. The season's excavations were productive of results differing entirely from those of former years. They are also of far more than ordinary interest, since they throw light, for the first time, on the industries of a Romano-British town, a subject on which hitherto no information has been accessible. The town, which covers a hundred acres within the line of wall, is a mile and a half round, and the excavations, which have so far extended to about 40 acres, have revealed a market place, courts of justice, a circular temple, and baths. With the exception of the irregularly placed house of the corridor type, and possibly of a second south of it, only one other house has come to light in the four insulæ excavated. The remaining ground is occupied, chiefly along the main line of street, by a series of rectangular enclosures or buildings, in connection with which are placed somewhat capriciously a number of very curious hearths or remains of furnaces. Besides these rectangular enclosures, all placed along the main street, there are other smaller buildings, chiefly in the open ground which lies behind them. That these buildings and adjuncts are not of a domestic character is obvious, and they can only have belonged to some industry to which this quarter of the city was apparently devoted. There is every reason to believe that this industry was that of dyeing, a suggestion to which support is given by the unusual number of wells discovered. Comparison with buildings used for similar purpose in Pompeii confirms this idea. With the exception of a medium-sized capital and base of a Doric column, and a fine slab of Purbeck marble, no important architectural remains have been discovered. Of minor objects in metal, bone, glass, and iron, the usual variety has been found, including a gold ring of good design. The ordinary find of coins has been surpassed by the discovery of a hoard of upwards of 250 silver denarii of early date, ranging from Mark Antony to Severus, covering a period of about 250 years. These were claimed by the Treasury as treasure-trove, but were subsequently returned for inclusion in the Silchester Loan collection in the Reading Museum, after the deduction of a certain number for the national collection in the British Museum.

THE Kaye family, of Cawthorne, near Barnsley, have decided to bear the whole cost of completing the fabric of Oakenshaw Church by the erection of a Tower and Spire (120 feet high), and the addition of a Choir Vestry and Porch on the south side. The Church was erected six years ago at a cost of £4,500, the members of the same family being liberal subscribers to the original funds. Messrs. Milnes & France, of Bradford, the Architects, have been instructed to proceed with the works at once.

It is not generally known that Ford Madox Brown was once a partner in the firm of William Morris & Co., and whilst so engaged prepared a series of cartoons for stained-glass windows. These were bought at his sale by Mr. Harold Rathbone, who, considering that they should be more extensively known, has gone to the expense of reproducing twenty of the most important. These he will publish very shortly through the Autotype Company. Apropos of reproductions, certain experiments which have been conducted in Germany in imitating paintings in colour have met with a success which is astonishing. A specimen of Raphael's "Marriage of the Virgin," which will shortly be on view in London, will show what a considerable advance has been made.

At the meeting of the Incorporated Society for Promoting the Enlargement, Building, and Repairing of Churches and Chapels, grants of money were made in aid of the following objects:—Rebuilding St. Mary's Church, Swansea, £350; towards enlarging or otherwise improving the accommodation in the Churches at Claphorn St. Leonard, near Oundle, £25; Killamarsh St. Giles, near Rotherham, £20; Poynington All Saints', near Sherborne, £25; and Watney Street Christ Church, in the parish of St. George's-in-the-East, £20. The following grants were also paid for works completed:—Fleur-de-lis St. David, in the parish of Bedwelty, near Cardiff, £100; Brixton St. Mary, near Plymouth, £40; Wetton St. Margaret, near Ashbourne, £20; St. Mabyn, near Bodmin, £40; and Barnsley St. Paul, £30. In addition to this, the sum of £427 was paid towards the repairs of 39 Churches. The committee sanctioned the appointment of Mr. R. Norman Shaw, R.A., as president of the Committee of Honorary Consulting Architects, in the place of Mr. Ewan Christian, and the two vacancies on the committee were filled up by Mr. T. Graham Jackson, A.R.A., and Mr. C. H. M. Mileham.

THE Finance and Estate Committee of the Liverpool City Council recently considered a report from the Corporation land steward and surveyor (Mr. T. Sheldermine, jun.) on the value of the land fronting to Byrom-street, which the Library, Museum, and Arts Committee desire to have set apart as a site for an extension of the Museum and School of Science and Technology. Upon consideration of this report, they passed a resolution to inform the Library, Museum, and Arts and Technical Instruction Committee that if the Council approve of a scheme for the extension of the Library and Museum buildings, the Finance Committee are prepared to recommend the Council to appropriate the land at the corner of Byrom-street for the purpose, subject to the museum account being charged with the payment of a ground rent of £600 per annum, to be carried to the credit of the general rate. By a recent resolution the Council decided to adopt the Museums and Gymnasiums Act, which, from the 1st January next, will enable the Library, Museum, and Arts Committee to levy a rate of $\frac{1}{4}$ d. in the pound for museum purposes alone, in addition to the rate of 1d. which at present covers all charges in connection with the public institutions—the central and branch libraries, reading-rooms, museum, art gallery, and public lectures—under the direction of the committee. This 1d. rate has now for some years been inadequate to meet the growing demands upon it, and its insufficiency has been further increased owing to the Finance Committee having instituted within the past year or two the practice of requiring the payment of city rates for the Library, Museum, and Art Gallery—a payment which absorbs a considerable proportion of the Library Committee's income. The present resolution of the Finance Committee, which is pretty certain to give rise to a severe contest in the Council, is in pursuance of the policy that no part of the estate of the Corporation shall be devoted to public purposes, without, if possible, a payment to the city fund out of the rates controlled by the Committee using the particular property as nearly as may be equivalent to what would be received from private leaseholders. The $\frac{1}{4}$ d. museum rate will bring in something over £5,000 a year; but this for thirty years at least will be no more than enough to pay the interest and sinking fund of the sum needed to carry out the extension. Hence, if the view of the Finance Committee be upheld, the Library Committee would have to administer the larger building out of resources which would be £600 a year

less than at present. In the view of those interested in this improvement the resolution cripples the scheme.

It is said that large orders are shortly to be given by the Russian Government for material for the construction of new railways and important extensions of the systems in the eastern and southern parts of the empire in Europe, and that a large proportion of such orders may be considered likely to be given to English firms. In anticipation of this, several representatives of French and German houses have arrived in St. Petersburg, but, with the exception of something given to one of the French agents, no orders have as yet been placed. It is also stated that the laying and equipment of just over two thousand miles of new rails are to be provided for, partly for military purposes, but chiefly in order to open up the agricultural districts.

NEXT year, the centenary of the death of Robert Burns, a statue of Highland Mary will be unveiled at Auchamore Farm, near the town where Mary Campbell was born. It will be of white marble, and will be easily seen from the decks of passing steamers on the Clyde, as it will be placed on the rocks in front of the ruins of Dunoon Castle. The figure will be standing, the head turned aside slightly. The details of costume will be exact, including kirtle, plaid, and shawl. The sculptor is Mr. W. W. Stevenson, of Edinburgh.

THE Vestry and the Public Library Commissioners at Hampstead are at loggerheads, and seven of the nine forming the latter body have resigned office. A year or two ago the ratepayers of the borough of Hampstead adopted the Public Libraries Act, on the first occasion of a poll being taken on that subject, and the Hampstead Vestry appointed nine Commissioners to carry out the provisions of the Act. The Commissioners purchased a site for a Central Library, took over the management of a Free Reading Room in the old part of Hampstead, established a branch Free Reading Room and Lending Library in Priory road, Kilburn, and established an open-air station for exhibiting daily newspapers in rotation throughout the week in another portion of the parish. For the Central Library they invited plans from a selected number of architects, with the late Mr. Ewan Christian as arbitrator, proposing to expend a sum not exceeding £9,000 on this building. At this point disagreement sprang up between the Vestry and the Commissioners. The Vestry, having the power to give or refuse its sanction to the proposed expenditure of the Commissioners, claimed the right of being consulted with reference to the proposed Central Library, and soreness was also felt with regard to the selection of architects. Mr. H. Harben, J.P., Chairman of the Vestry, presented £3,500 to the Vestry towards the cost of the Central Library building, and offered to increase that generous gift to £5,000 provided that not more than that sum was expended for such a building. In

this he was supported by the Vestry as against the Commissioners, who maintain that a building worthy of the parish cannot be erected for that amount. The Vestry has applied to the Local Government Board for power to take over the duties of the Library Commissioners under the Parish Councils Act, and the ratepayers have received by post a communication from the commissioners, announcing the resignation of seven of their number. Meanwhile a very generous gift lies in abeyance.

THE Ecclesiastical Commissioners mention in their annual report two building schemes of special interest which, though making no charge on their funds, had to be submitted to them for sanction. These relate to alterations and additions to be made in the archiepiscopal residence at Bishopthorpe, and in the episcopal residence at Ripon. It is interesting to note that concurrently the Bishop of Lichfield's house is to be overhauled and improved, as, indeed, it has long needed to be. The Commissioners announce for general purposes an appropriation of £150,000 during the current year, in the following proportions:—£40,000 in meeting benefactions offered in favour of benefices;



OLD HOMESTEAD AT GOMSHALL: SKETCH BY C. IRWIN

£30,000 in endowing Churches in public patronage to which districts have been legally assigned since the census of 1881; £74,000 in meeting local claims, and cases to which the Commissioners are already pledged; and £6,000 in making grants towards the maintenance of assistant curates for poor benefices where the population is not less than 6,000 persons, and where benefactions of not less than £2,000 are forthcoming. The capital value of the moneys given out by the Commissioners now exceeds thirty millions sterling.

ONE of the most wonderful clocks in the World is being exhibited in St. Petersburg. It was originally manufactured for the late Duke Charles of Brunswick, who bequeathed it to the Swiss Confederation. There are no fewer than ninety-five faces to this colossal timepiece. It indicates simultaneously the time of day at thirty different spots of the earth's surface, besides the movement of the earth around the sun, the phases of the moon, the signs of the zodiac, the passage

over the meridian of more than fifty stars of the northern hemisphere, and the date according to the Gregorian, Greek, Mussulman, and Hebrew calendars. So complicated are the works that it took two years to put them together after the clock had been sent in detached pieces from Switzerland to Russia.

DURING the winter months, in which excavation is either difficult or impossible at Jerusalem, Dr. Bliss received the sanction of the Palestine Exploration Committee to undertake a journey to the land of Moab, including the examination of Medeba, Kerak and other places of historical interest beyond the Dead Sea. Dr. Bliss had the special advantage of a letter of recommendation from his Excellency Hamdy Bey, the well-known director of the Museum of Constantinople. He was received most cordially by the Governor of Kerak, and was afforded the fullest permission to measure and make plans of buildings. Dr. Bliss has discovered a previously unknown Roman Fort, and a walled town with Towers and Gates, like the interesting town of M'Shita. The Committee, therefore, appointed Mr. Archibald Campbell Dickie, A.R.I.B.A., to go out and assist Dr. Bliss in the work, and especially in drawing plans and sections, and Mr. Dickie has already arrived in Jerusalem.

A CHICAGO man purposes getting up a spectacle for the coming summer that will be peculiarly Chicagoesque. He expects to lease 100 acres of land in one of the suburbs, and build a railway track thereon. He will buy two engines at an estimated cost of £2,000 a piece. Then he will erect an immense grand stand on each side of the railroad which will accommodate 100,000 people. The engines will be steamed up to their full capacity and started towards each other. The spectacle when they collide, the Chicagoan calculates, will be so thrilling that thousands will want to witness it.

ABOVE the Colonnade of the Exhibition at Venice is a marble frieze surmounted in the centre by a statue of "Glory," modelled by the sculptor Nono. From the Vestibule a central door leads into an octagonal Saloon in the style of the Renaissance, and from this into the Grand Central Hall, the end of which is raised a few steps, and is semi-circular. Two lateral doors in the Vestibule lead into two other splendid Halls.

BUTE House, Petersham, is in course of demolition, and it is understood that the grounds, some twelve acres in extent, and separated from the Petersham Park by a wall, are to be converted into a building estate. If the project be carried out, one of the loveliest rural prospects in the neighbourhood of London will be irretrievably lost. Bute House, which is close to the entrance to Petersham Village, and was formerly the seat of the Marquises of Bute, underwent a vicissitude common enough in the history of spacious old houses, and was for some years occupied as a boarding-school. It is screened from the road by a wall, and at the back looks on an

old-fashioned lawn, beyond which stretches a small park, surrounded by a shrubby walk and flanked to the right by a walled garden. The lease of the demesne having run out, the property was purchased some years ago by Sir John Whittaker Ellis, who has always taken great interest in the prosperity of Richmond; and he is, of course, entitled to let out his copyhold on building leases if he chooses to do so. He explains now that he has received practically no income from it, and appears desirous of making something out of it. At the same time, it is to be hoped that his suggestion that the estate might be acquired by the Commissioners of Woods and Forests—as it could be, he says, on “most liberal terms”—will not be overlooked. “The attention of the authorities,” he adds, “has already been drawn to the value of this property in conjunction with Sudbrook Park, but it is now absolutely necessary that some pressure should be brought to bear; for, although the amount at which it may be dealt with is small compared with the large interests concerned, I can no longer afford to allow the property to remain a dead letter to me.” No one can blame Sir John Whittaker Ellis for coming to this decision. Landowning is not such a profitable pursuit now-a-days that freeholders can afford to be sentimental. It is a matter for regret that the property was not acquired by the Crown for annexation to Richmond Park, and it is to be hoped that the offer of its present owner will be duly considered and, if possible, accepted, so that the land, at least, and the old garden may be added before the whole site be lost.

THE drawings which have gained prizes or medals of merit in the annual competition for the scholarships and exhibitions of the Royal Institute of British Architects have been on view at the Law Library, Liverpool. The exhibition was much stronger in the matter of technical excellence than in originality. This was conspicuous in the drawings made for the Institute's silver medal for measured work and the Pugin Travelling Studentship. The Tite prize for a lake Pavilion in the Classic style; and the Owen Jones Studentship for decorative design, had also called forth some work of high merit, though the labour of detail involved in making some of the drawings must have been enormous. The drawings have been exhibited under the auspices of the Liverpool Architectural Society, being, in accordance with custom, circulated among the allied societies in the chief centres of the provinces.

THE foundation stone of the new Schools of St. George's Parish, Wigan, was laid by Lady Powell, wife of Sir Francis S. Powell, Bart., M.P., on Saturday week. The building is three storeys high, and is to replace the present old mixed schools. Besides a large Central Hall on the ground and first floor, there will be in the basement a large Gymnasium, Cookery Class-rooms and Work-

rooms. The accommodation is for 900 children, and the cost £6,000. Mr. A. Wigan is the builder, the architects being Messrs. Heaton & Ralph, of Wigan.

BENTLEY PRIORY, in Middlesex, is in the market, and will be brought to the hammer towards the end of June. Sir Walter Scott and the poet Rogers were constant visitors at Bentley, and it is believed that “Marmion” and “The Pleasures of Memory” were both written within its peaceful and exhilarating seclusion. The mansion was at one time occupied by the Marquis of Abercorn, and afterwards by Adelaide, the Dowager Queen of England, who died there. The beautiful garden contains a summer house which was a favourite tea room of the Queen.

To facilitate the building operations now in progress in Great George street for new premises for the Institution of Civil Engineers, it has been found desirable to abridge the session, so that before the recess only the special meeting, on the 2nd of May, and the annual general meeting, on the 28th of

THE proposal to set up a bronze statue of Dickens in some public place in London meets with general approbation. Nothing less was to be expected. Dickens' memory continues to be cherished by the English-speaking World. He did not, as has been stated, leave the direct expression of a wish that no statue of his should be erected after his death. He merely said that if his books were not sufficient to keep him in memory no monument would avail. But he does live through his books, which are still extraordinarily popular. It is to be hoped that the scheme of the statue will prevail.

SOME interesting experiments have recently been made by a London firm as to the relative merits of telephonic wires. They prove that on the whole the old copper wires are equal if not superior to the new compound wires with a steel core, and a coating of some other metal. The experiments also tended to prove that telephones can act for a considerable distance when laid down on the soil without insulators. In a field of heavy clay the voice was audible for a mile

and a half. It failed to carry, however, when the wire had been fixed with staples, and thus the plan could hardly be brought into general use, since loose telephone wires would render walking exercise rather dangerous. The trials, though of a rough and ready character, may possibly lead to some changes in the construction of telephone plant, chiefly in the direction of simplicity.

A NEW Church has been erected at the village of Rufforth, near York, through the generosity of Mrs. and the Misses Middlewood, of Rufforth Hall, and was dedicated and opened by the Bishop of Beverley. The edifice which it replaces had become much dilapidated.

The new Church is situated a little to

the north of the site of the old one, and the removal of the latter will permit of the extension of the burial ground. The new Church consists of Nave, and Chancel, and South Aisle, with an accommodation for 180 worshippers. A prominent feature of the exterior is the handsome square Tower (which is surmounted by a Spire), the lower portion of which forms the Vestry, and is placed on the south side. Fragments of interesting work which remained from the old Church have been preserved in the new building. The Late Decorated style has been followed. The walls are faced both inside and out with stone, and the whole of the woodwork (which includes screens, organ case, &c.) is of oak. The main Roof is covered with red tiles, and the main Aisle with the lead off the old Church, which has been re-cast. The East Window is filled with stained glass, and the Chancel pavement is of black and white marble. A new organ has been built by Messrs. Abbott and Smith, of Leeds, from specification by Dr. Naylor, organist of York Minster. On the exterior of the south side of the Tower is the dial of a clock, which was made by Potts and Sons,



BEAUGENCY ON LOIRE: A SKETCH BY FRANK T. BAGGALLAY.

May, will be held, and these at the Royal United Service Institution.

A NEW Technical School and Free Library, erected by the Corporation of Nelson, at a cost of about £10,000, exclusive of the value of the site, have been opened by Sir Philip Magnus. The buildings form a handsome pile in the centre of the town, and will at some future time constitute the south wing of the Municipal buildings. The lending library has accommodation for 20,000 volumes, and at present contains about 6,000. Prior to declaring the Institute open, Alderman Greenwood, chairman of the Technical Instruction Committee of the Town Council, presented to Sir Philip Magnus a suitably inscribed gold key. Sir Philip Magnus, in the course of a speech on technical instruction, stated that the Technical School had been erected not to meet any imaginary wants, for, although it had not been formally opened, there were over 1,000 students in attendance at the School already. Nelson was one of the few towns in the kingdom that had levied a voluntary rate on themselves for the purposes of education.

of Leeds. The whole of the work has been carried out from designs by and under the supervision of the architects, Messrs. Demaine and Brierley, of York. The entire cost of building and furnishing has been defrayed by Mrs. and the Misses Middlewood, in memory of various members of their family, and, in addition, they have given a large sum for an endowment.

At a meeting of the Governors of the Glasgow and West of Scotland Technical College, the Conveners of the Teaching and Staff Committee having directed attention to the success of the courses in Architecture and Building Construction, conducted by Mr. Gourlay, of Glasgow, and having suggested the desirability of recognising this success and strengthening the department by raising the lectureship into a professorship, it was intimated that Mr. Gourlay was willing to devote himself to the work of the department, and to conduct day classes in Architecture. The Governors, therefore, approved of the recommendation to create a Chair of Architecture and Building Construction, and to appoint Mr. Gourlay as its first occupant.

The students attending the Architectural Classes of the Glasgow and West of Scotland Technical College spent a recent afternoon at Glasgow Cathedral, when Professor Gourlay conducted them over the Cathedral, explaining in detail many points which he had referred to in his course of lectures on the Cathedral during the past session. Attention was particularly drawn to the various Renaissance monuments in the Cathedral and Churchyard.

A SHOW of oil paintings by most of those artists—other than the great portraitists—who have assured to Britain a school of its own, is again held at the Dowdeswell Galleries. There are a dozen or two of telling sketches by Constable. A strong note is at once struck by the Old Cromes met with just inside the door. "Sunset—Driving Sheep," is delightfully luminous, peaceful and nature-full. Some of his strength and largeness mark "Carting Timber," by James Stark, whose "Near Cromer" is an excellent example of one who is a master in composition, but whose laborious delineation of foliage so often detracts from his more usual scenes of wooded glades. "Old Windsor," by Bristow, is remarkable for the exquisitely-painted still-life in the foreground. "The Day Before the Fair," by Francis Wheatley, is harmonious and atmospheric; but his Welsh landscapes and other pictures, crude in colour, arouse wonder that he should ever have been much estimated. The spirit of the time is scarcely one for revival of such art as his.

The laying of the foundation-stone of the first Roman Catholic Church in Morecambe was an occasion of deep interest. The Church, which is in Old Poulton, is estimated to cost £3,000, including Sacristies, which are designed to connect to a future Presbytery, and will give accommodation for between 200 and 300. The building will be

of the early Decorated style, massively built of brick, with facings of Yorkshire pierpoints and dressings of Whittle stone. The architects are Messrs. Pugin and Pugin, of London, and the contractor Mr. Charles Walker, of Preston.

WHAT is described as a Model School has been opened at Sefton Park, Liverpool. The School has accommodation for 1,146, and is divided into infants, mixed junior and mixed senior, having separate internal staircases for boys and girls, together with two external staircases from the first floor, and separate exits from the ground floor. In this way each class-room can be emptied independently of any of the other rooms, and ample provision has been made for the escape of the children in case of fire. A swimming bath is placed in the basement; cooking class room, technical workshop, and covered playgrounds are also provided. The style of the building is an adaptation of the Gothic. The dados are of glazed brick, the staircases being also lined with straw coloured brick. Sliding screens are largely used, so as to throw several rooms into one large one when required. The heating is by the low pressure system. The playgrounds are paved



AT BEAUGENCY: BY FRANK T. BAGGALLAY.

with concrete, and surrounded by low coped walls, surmounted by iron railings. The whole of the work has been designed and superintended by the architects, Messrs. T. Mellard Reade and Son, of Liverpool.

MANY well-known people "dropped into Romano's" the other night, when the well-known Strand restaurant was formally reopened after having been rebuilt from designs by Mr. Walter Emden, L.C.C. The building has been considerably enlarged, as the premises adjoining it, formerly in the occupation of a Strand tradesman, have been acquired. There are two entrances from the Strand, the eastern leading to the buffet, and the western to the restaurant. At the dinner, given to celebrate the inauguration of the new building, Mr. Byron Webber presided, and among those present were Sir James Linton, P.R.I., Mr. James Orrock, R.I., Mr. Cecil Howard and Mr. Henniker-Heaton, M.P.

NINE scientific and professional societies sent representatives to the anniversary dinner of the Institution of Mechanical Engineers, held at the Freemasons' Tavern,

under the presidency of Professor Alexander Kennedy. The toast-list appeared to be of formidable length, but brevity was the order of the evening, so that the large company were not detained unduly. Jocularly distinguished the speeches. Professor Ramsay was amusing at the expense of argon, described by Mr. Fletcher Moulton, Q.C., M.P., as a celibate. Helium, Professor Ramsay said, appeared in this respect to be argon's twin brother. They were the "Heavenly Twins," and he was afraid they were bent upon keeping up the celestial tradition as to marriage, although he did not despair of tempting them into the nuptial state, when, naturally, they would become more interesting. Mr. S. B. Bancroft was one of the guests, and he referred to the difficulty experienced by a speaker in facing an audience without the footlights to protect him; for, in his case, they served, as the great fires lighted by travellers in the desert, to keep away wild beasts. Other speakers included Sir H. E. Roscoe, M.P., Dr. Michael Foster (Secretary of the Royal Society), Rear-Admiral H. F. Cleveland, Professor Roberts-Austen, Sir Douglas Galton, and Professor A. W. Rücker. There were also present Sir Richard Webster, Q.C., M.P., Professor Silvanus Thompson, Sir

R. Rawlinson, Sir F. A. Abel, Mr. E. W. Richards, Mr. T. Chatfield Clarke, and Mr. R. E. B. Crompton.

LONG pending has been the amalgamation between the Surveyors' Institute of this country and the Irish Land Agents' Association, the kindred organisation in the sister isle. It is, however, at length on the eve of completion. In consequence mainly of essential differences in law and practice in both countries, many difficulties have had to be faced in the matter, but at a general meeting of the English body a series of amendments and additions to the bye-laws of the Institute will be proposed, and, if approved of, the amalgamation will be accomplished without delay. Con-

sidering that each association is genuinely representative of the landed-interests of its own country, amalgamation, for many reasons, is a strong move.

A LARGE new stalactite cave has been discovered at Hohen-Limburg, in Westphalia. It is said to be in no way inferior to the celebrated Dechen Cave. Its owner has had it explored by an expert, who reports that it contains large arches and colonnades, long alleys and grottos, full of the finest stalactite formations. The most beautiful of these are snow-white "curtains," several yards long and broad. As a considerable part of the cave has not yet been explored, it is possible that it is equal to the Dechen Cave in size as well as in beauty. As in the case of the Dechen Cave, its discovery was due to a mere accident. Some people who were felling a tree noticed a cleft in a rock. They shouted into it, and the prolonged echo betrayed the existence of the cave.

THE Corner Stone of the new Christ Church at Araton, near Bolton, has been laid by Lord Stanley, M.P. The cost will be about £4,000, towards which the late Mr.

J. W. Holden made a bequest of £2,500. It is anticipated that the building will be finished by Easter, 1896. The design is by Mr. R. Knill Freeman, F.R.I.B.A., of Bolton, and is in the Decorated style, the plan embracing Nave, north and south Transepts and Aisles, Chancel, Clergy and Choir Vestries, with Organ Chamber over, on the south side of the Chancel, space being left for a Chapel or Chancel Aisle on the north side when required. The length will be 101 feet, width across Transepts 59 feet 2 inches, and across Aisles 44 feet, the Nave

The Builders' Journal.

MEN WHO BUILD.

No. II.

MR. WILLIAM BLAKE RICHMOND,
A.R.A.



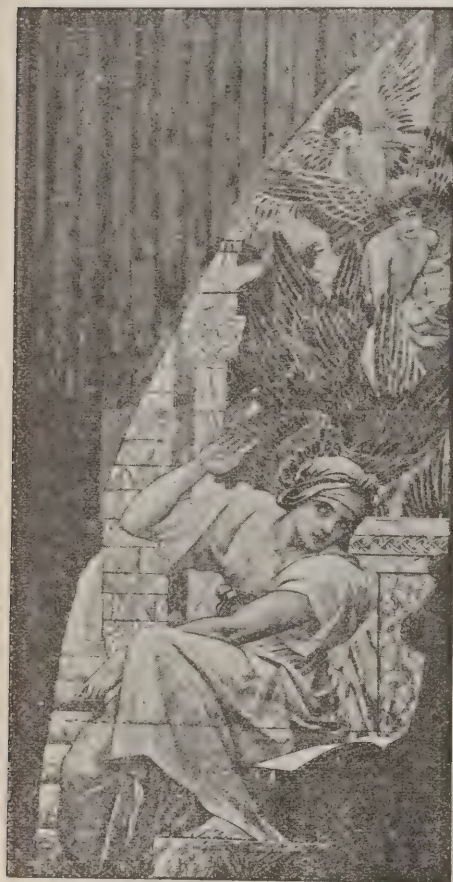
R. W. B. RICHMOND, bred within the pale of conscientious art, developed early in life the ambitions of his father, George Richmond, the Academician. He was born in London two and fifty years ago, and at the extraordinary early age of fourteen obtained two silver medals for design at the Royal Academy. He then commenced to paint portraits, and exhibited them at Burlington House, and began his visits to Italy for purposes of study. Italian Art impressed him deeply; it made him almost a dreamer; and when in 1869—as a young man of only twenty-six—the Academy walls exhibited his "Procession in Honour of Bacchus," he was hailed from all sides as a fine painter of the imaginative school. The study of the antique had done him good; he discovered fields almost untrodden by native artists; he went deeper than the impressions of his modern surroundings for his subjects, and in 1872 he gave us, what some consider to be his finest effort, the "Lament of Ariadne." Upon portraits he was still hard at work, and he has put upon the walls at Piccadilly during the past thirty years some of the finest specimens of portraiture exhibited by the modern English school. Curiously, Mr. Richmond has not brought an atom of his impressionist beliefs into his portrait painting. One would have thought that his love for imaginative subjects would have shewn its trace upon all his canvases; that he could not have kept idealism entirely out. But curiously, and very significantly, has he done so, and steered them entirely free from the daring splendour of Sargeant, the sublimity of Watts, and the piquancy of Shannon. He has been as sober sided as Herkomer and as truthful as Millais.

Mr. Richmond's connection with St. Paul's Cathedral was brought about in this way. When Messrs. Bodley and Garner had completed the sumptuous Reredos which created so much commotion in orthodox circles, Mr. Bodley was desired by the Dean and Chapter to suggest a decorating scheme for the Sanctuary. Had the Reredos never been constructed the extraordinary lack of colour in Wren's masterpiece would not have been so strikingly apparent, but the moment the gorgeous conception of Messrs. Bodley and Garner was unveiled to public gaze, then the decoration of the fabric became a vital fact. Architects remember how Mr. Bodley's scheme of painting the stone and gilding the enrichments utterly failed. The eminent architect requested his friend Richmond to prepare him some "scribbling ideas," and Mr. Richmond, who was then on his way to Sicily, consented. On his return he made some little sketches in pencil to half-inch scale, and by a further request, drew up a scheme for the whole of the Choir. These designs were submitted to the Dean and Chapter, and, upon their approval, Mr. Richmond magnanimously agreed to work upon the decorations ten months out of the twelve for a very moderate income.

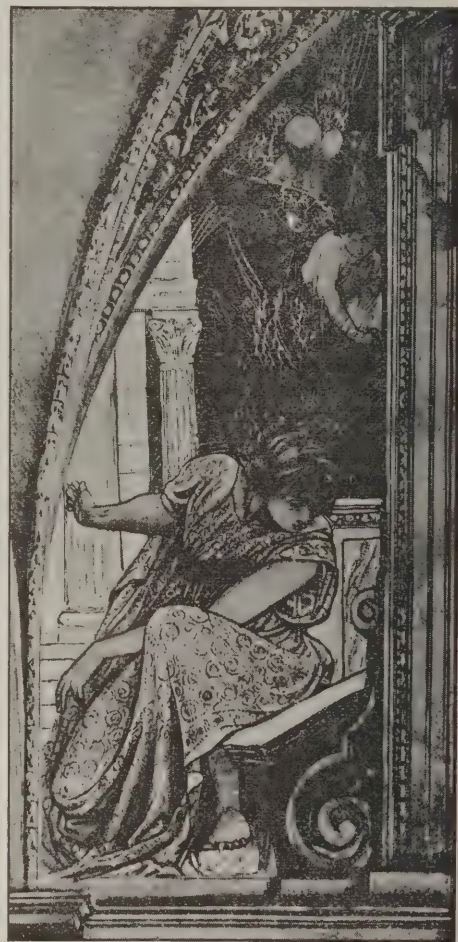
Mr. Richmond is following, as far as possible, the instructions left by Sir Christopher to his son, not in the actual design, for all decoration in Wren's time—says the accomplished A.R.A.—was extremely bad. Wren would have given us flying angels, clouds, and curtains, and that sort of thing, whereas Mr. Richmond, as a cultured artist should, believes that the more severe and archaic

the treatment in a Church possessing the fine lines of St. Paul's—and in face of the detail, which is not good—the better the effect.

The first question to decide was the material in which the work should be done. Mr. Richmond maintains that the only material for London is glass mosaic. Fresco and different methods of tempera painting cannot be used with safety; and oil is unsuitable because it blackens, and there is no luminosity in its surfaces. But mosaic is absolutely permanent, and it allows for the introduction of gold and silver, which are all powerful and useful in decoration. The colours which tell best are gold, blue, a pale blue-green, and a dull red. It was thought, if it were possible to obtain English mosaicists, that native artists should do the work, whereupon Mr. Richmond undertook to procure them, or, at worst, to train them himself. It happened that he had seen a little bit of mosaic which had been done for a picture by Holman Hunt, by Powell, of Whitefriars, and Mr. Richmond made an arrangement whereby the men who had actually carried out this work should, with others of their colleagues, be lent to him, and Messrs. Powell were entrusted with the supply of the materials to be used in the mosaic work. The little band of workers were transported to Hammersmith, where, in the gardens of Beavor Lodge, the artist built a special studio for them. For four months he taught



IN THE APSE, ST. PAUL'S.



IN THE APSE, ST. PAUL'S.

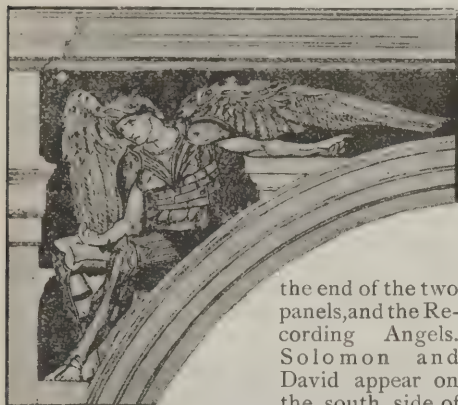
them, day after day, how to cut the mosaics and how to lay them. When all was perfect, serious work upon the fabric of the Cathedral itself was attempted by decorating the smaller domes, upon which the Creation of the Birds is represented. Upon that work fourteen men were engaged, and when that was completed, Mr. Richmond designed the ornament and the colouring of surrounding parts. Then the two Clerestories and the three east windows were attacked, and upon these Mr. Richmond largely worked himself.

and Chancel being 21 feet wide. There will be a Porch on the south side, and a door on the north, and a Bell Turret on the Roof. The materials used will be, externally, flat-faced Yorkshire pierpoints, relieved with red Rainhill stone dressings; and internally, Corsham Down bath stone. The Roof will be covered with Welsh slates, and the woodwork to be unvarnished pitch pine. The Church will accommodate 432 persons.

At the Fine Art Society, in one of the smaller galleries, Mr. Ernest George brought together a series of water colours depicting scenes in Tunis, Algeria, and that now fashionable resort of the painter, Tangiers. His sketches were marked by ease, breadth, and a certain daring brilliancy of colour.

THE Isle of Man has lately been exercised about the location of a Pro-Cathedral for the diocese. A bill before the House of Keys provides that until the restoration of the ancient Cathedral Church of St. German, now in ruins, the Chapel of St. Nicholas, at Bishop's Court, may be designated the Pro-Cathedral. There was much variety of opinion expressed at the last sitting of the House, some, it is stated, being in favour of Peel, others of Douglas; but eventually the text of the bill was allowed to remain, so that St. Nicholas Chapel, as containing the Bishop's chair, will remain the Cathedral of Sodor and Man until another is provided.

He prepared full-sized cartoons, and painted a great deal of the windows himself, upon the glass which he selected himself. Then he proceeded to do the figure of Christ at



the end of the two panels, and the Recording Angels. Solomon and David appear on the south side of the Sanctuary, and the Noah and Melchisedek

panels on the east end of the Apse. Whilst this work was slowly proceeding, the orna-

When all is completed—the two bays and window cornices and the windows of the Sanctuary—three years will have been occupied in covering 10,000 square feet of surface, and every inch has been worked out in full-sized detail by Mr. Richmond's own hands. The Duke of Westminster, in addition to his annual subscription to the decorative fund, has undertaken to bear the expense of the two Transept windows, and to these Mr. Richmond will next turn his attention, and it is hoped that this will lead—upon the completion of the Choir—to a vigorous attack being made upon the body of the Cathedral, which no doubt will be devoted to the history of the English Church from the earliest period down to Pre-Reformation times.

Mr. Richmond was at his studio when we called upon him, and welcomed us on our wanderings after the beautiful. His coat and waistcoat were upon a hook instead of upon his back, and the fragrance of a good French briar provided incense to his inspiration. When the Academician first went to Beavor Lodge, green fields surrounded his old-World garden, and the scent of the haw-

vision of an oak case and the formation of a new Vestry, where the organ now stands, in place of the present one situate under the Tower at Worsley Parish Church. The cost of the proposed alterations is estimated at between £250 and £300.

THE foundation stone of the new Church of St. Lawrence, Barton, near Preston, was laid by Viscount Cross, G.C.B., last week. The new building is to cost £5,000, and is to take the place of an older building, practically on the same site, which existed before the Reformation. The late Miss Mary Cross gave £2,000 towards the building of the Church, and the late Mr. Charles Roger Jacson supplemented this with a legacy of £2,500.

IN Greece, excavations will be shortly resumed at Eleusis, and researches will be made in the prehistoric tombs at Cephalonia. At Delphi the French will soon begin work again, as they have received from their Government a sum of 150,000*fr.* for the purpose.

By means of public subscriptions a handsome memorial has just been erected in the Worthing Cemetery to the captain and crew of the steamship *Zadne*, of North Shields, which foundered near there during the terrible gale of November 14th last.

DR. WHITESIDE, Roman Catholic Bishop of



PART OF DESIGN FOR ONE OF THE SAUCER DOMES: "BIRDS."

ment on the barrelled vaulting was commenced. It is gilded, and over the gold is painted a very delicate pattern in blue, so that the gold should not be too fierce, and in order to prevent the bosses from telling so strongly as they would when wholly gilt, the shadows are fitted with white. Fifteen artists were employed on this, and it took them three months to complete it.

At this point in the progress of the work, Mr. Richmond went off to his beloved Italy, and made more special study of mosaics and window painting, visiting once again the beautiful works at Venice and Ravenna, revelling in the glories of Florence and Rome. On his return, the fine mosaic of the Creation of the Fishes was commenced, and the angels filling the pendentive spaces were fixed, and upon this the noble band of operatives is in full labour. The third dome of the Sanctuary will illustrate the Creation of the Beasts, and the whole will then represent the Creation in all its forms and phases—physical, moral and spiritual. The Herald Angels will be seen all down the Church, forming an avenue of great architectural figures, giving motive to the design.

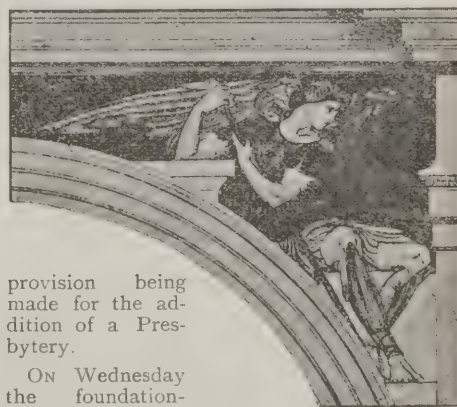
thorn was not unknown; but the wretched builder has embittered his existence and the delights of the charming old house, more charming through the associations of such a man—are hardly intense enough to prevent his flight. Some day, no doubt, the march of commercialism will drive him out of his dear old home, to seek solitude and peace elsewhere.

THE construction of the new Bridge over the river Dee between Queensferry and the Cheshire side, which is to cost £13,000, was commenced last week. Mr. T. K. Irwin, of Hurnsworth-on-Tees, has been appointed clerk of the works. The contractors for the work are the Tee-side Waggon and Engineering Company. The making of the approaches to the Bridge commences in about a week.

THE operative plasterers and labourers in Manchester, Salford, and district are on strike. They demand an increase of wages, and a reduction of what is known as the two miles radius to one mile. The masters offer $\frac{1}{4}$ d. increase, but refuse to concede a one mile limit.

A DESIGN has been submitted for the removal and re-arrangement of the organ and the pro-

Liverpool, laid the foundation stone of the first Roman Catholic Church at Morecambe last week. The new Church is situated in Old Poulton, and is estimated to cost £3,000,



ANGEL OF THE PASSION.

provision being made for the addition of a Presbytery.

ON Wednesday the foundation-stone was laid of a new Oddfellows' Hall for the Cwm-burla district, Swansea, which is to be built at a cost of £1,200, subscribed by philanthropic persons.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

AN ordinary meeting of the Institute was held on Monday evening, April 22nd, Mr. F. C. Penrose, F.R.S., the president, in the chair. Two papers on "The Use and Abuse of Marble for Decorative Purposes," were read, by Professor G. Aitchison, A.R.A., and Mr. William Young, of London and Glasgow.

Professor Aitchison briefly touched upon the various kinds of stone classed as marble, and referred to the distinctive qualities and beauty of that material. The Greeks seemingly chose it mainly on account of the perfection to which it could be worked and the delicate modelling it would express, and the Italians followed in their footsteps. Coloured and variegated marbles were, in high favour among the Romans of the Empire, and enormous quantities were used by them, and every country in the then

and white, dark purple and white, or dark green and white. Black and white for columns, balustrades, and walls had a dignified effect; but in these uses, as in pavements, the white should greatly predominate, or the effect would be too funereal. If an effect of richness, magnificence, or gorgeousness, or of delicacy or loveliness, were required, the same rule, held good in marble as in painting. The Professor then laid down maxims as to the employment of flowered marbles, and recommended for study in their use the Pantheon at Rome, St. Marks at Venice, St. Sophia at Constantinople, the interior of Genoa Cathedral, and other buildings.

Mr. William Young said he should restrict his remarks to the use of marble in interiors. The employment of marble, which had formerly been almost entirely absent from English architecture, had developed enormously in recent years; but was it used to the greatest advantage?

The marble on walls, where solid blocks would be useless waste, should be so treated as to show that it was a lining. Box-marble chimney-pieces, consisting of slabs of marble placed one in front and one on each side, as though to give the appearance of a solid block, were not considered a true use of marble, and not architecture. With regard to the question, "should colour follow form?" the author was of opinion that there was much sound truth in Mr. Ruskin's dictum that colour should be visibly independent of form, although in actual architectural work it was found that colour, as a rule, must follow form.

GREEK LOCKS.

THE lock, called the Lacedemonian, much celebrated by ancient writers, was especially fitted for the inner chambers of houses; the bar fastenings continuing to be



A DESIGN IN THE FORTHCOMING ACADEMY: W. B. RICHMOND, A.R.A.

known World was ransacked for quarries of marble. The marbles used in the Palaces, Churches, &c., of the Dark Ages and Early Mediæval days were mostly plundered from the ancient Roman buildings. The great drawback to the use of flowered marble for columns that bear weight was its liability to flaws and defects, and every shaft should first be tested by the hydraulic press. Marbles mainly formed of carbonate of lime were worse than useless externally, as the polish rapidly perished. The value of marble for decoration was to colour harmoniously by means of a particularly beautiful and specially-coloured material. The finer flowered sorts had in their colouring every sort of motive and caprice that could astonish and charm. Monumental colour was as hard to get as monumental form, and demanded both knowledge and genius. The safest course was to adhere to one colour, or to some strong contrast of two colours, such as black

The true use of marble meant something more than merely lining walls with slabs of that material. As in other materials, the architect should follow a certain order and scheme to bring out his design; the material should be used so as to demonstrate its full effect. The worker revealed the beauties of marble; thought and skill must be added to make it beautiful in architecture. For use in a large way marbles should be few, but well chosen. With three or four different marbles handled by a master there was nothing within the range of architectural art, from simplicity to magnificence, that the architect could not accomplish. It was sometimes exceedingly difficult in selecting marbles for columns and arches, to get the particular type wanted to insure perfect harmony. Columns should be constructive, and not planted on for decoration, and square pillars should be solid marble, and not brick cased with 1-in. marble slabs jointed to imitate solid masonry.

employed for closing the outer doors of dwellings, and the entrance gates to cities. The Lacedemonian lock did not require a hole to be made in the door, for it consisted of a bolt placed in that side of the entrance door which opened, and on the inside of the chamber door. When a person who was outside wished to enter, it was necessary for him to insert the key in a little hole and so to raise the bolt; and, in time, this species of fastening was improved by the insertion of a bolt in an iron frame or rim, permanently attached to the door by a chain, and fastening the door by the insertion of a hasp, through the eye of which was forced the bolt inside the lock, by applying the key. It appears that the locks of the ancients were not of the same construction as ours, not being inserted, or morticed, into the doors; nor even attached, except by a chain, and being, in fact, mere padlocks.

THE RESTORED CRYPT OF ST. ANDREW'S.

LORD BUTE'S EXCAVATIONS.

AT that quaint bit of old Scotland, St. Andrew's, Lord Bute's excavations are now in full swing, but few know of them, save active archaeologists and antiquarians. They are well worth the attention of all architects. Lord Bute is excavating at the east end of St. Andrew's in and about the grounds of the Priory. Nothing seems to have been done in the way of excavation at St. Andrew's till 1879, when a man wheeling his barrow over a heap of rubbish felt the earth give way beneath him, and incontinently disappeared, barrow and all; he had fallen into what is now known locally as the Castle Passage. The place was duly examined and proved to be an undeniable subterranean alley, vaulted and floored by human hands, and running in a straight line from the Castle towards the Cathedral, for a distance of 90 ft.; there it was blocked by the wall of a house. It is provoking to think that in 1879 the house in question had only begun to be built, and that nothing but the anxiety of the builder prevented the passage from being pursued to its natural end. That, no doubt, is in the Cathedral, where some people believe there is a Crypt, but Mr. Hay Fleming, the Scotch archaeologist and the only authority on the matter, thinks there is no Crypt, and scouts the idea of hidden treasure. At any rate, the passage may be explored by any one who does not fear dust. Entering by a wicket of red brick which has been put up under the ivied wall of the Castle, the way descends abruptly at a height of 14 ft. and a breadth of 5 ft., with a groove cut in the rocky floor, until it widens suddenly and falls upon a lower storey. This is reached not without difficulty and a ladder, when the explorer finds himself in a room about 14 ft. broad and 10 ft. high. Passing through this he will come to the foot of a wide staircase cut in the living rock. There are 34 steps, and then comes the obstructing wall. In this room there are stone tables, shelves, and chairs; and worth noticing also are the *culs-de-sac* which diverge from the main passage close to the entrance, one of them going to the length of 21 ft. westwards, the other turning eastward for only 5½ ft.; they are usually explained by the theory that the builders were trying for the nearest way to the Cathedral. The Castle Passage, so fortuitously discovered, remains the only authentic trophy of its kind. Its discovery, of course, set people trying for other subterranean alleys. The Pends Passage was the most notable among these. It was discovered in 1884, when a plumber declared that he had come upon something similar to the Castle Passage 14 years before, when he was laying the gas-pipes of what was then the College Hall. The excavators pierced a road running south of the Priory at the point indicated by the plumber, and in two days' hard work disclosed a most promising and satisfactory passage. They explored it for about 70 ft. from the entrance, but encountered then the wall of the Priory and a vandal—in its proprietor of that day—who sternly forbade them to go further. So the Pends Passage was filled up. Its mystery, however, is dissipated, for Lord Bute's digging within the Priory has proved it to be little better than a drain. The conclusion of the whole matter seems to amount to a strong probability that there are many other passages if they could but be come at. What chance discovered once in the instance of the castle, chance will probably discover again, and considering its history, St. Andrew's may well be honey-combed with such hidden exits and entrances. Lord Bute began to excavate in October, 1893, without, so far as one can gather, any fixed design. He dug first about the site of the Sub-Priory's House, now used as the coal cellars of the Priory, to the extent of 80 feet, but found nothing of any interest. Next he turned to the site of the Refectory, a few steps south of the Priory, having the Cloisters on the north. The Refectory, according to Martine, the murdered Archbishop Sharp's secretary, was 108 feet long. Here the Crypt was laid open with several of its pillars standing upright. Pursuing something like the famous method of Zadig, Lord

Bute has filled in the missing pillars and stones, these and all new buildings being erected in red stone brought for the purpose from Dumfries. Thus the gray stone of mediæval builders and the red stone of those of to-day stand side by side, part of the same whole; and as the old masons' marks are plainly visible on their material, so their descendants have affixed theirs also, to each man's stone his own mark. At one end of the Refectory the remains of a short flight of steps is visible; no doubt it led from the Refectory to an anti-chamber. In the Crypt there are also the remains of a roundel. What was its use? Lord Bute and his architect believe that it may have been a winding staircase, and point to a similar construction in Durham Cathedral. On the other hand, Mr. Logan, the tenant of the Priory, suggests that the roundel may have been built to support an oriel window where the reader would stand during refection. Mr. Logan adds that the roundel at Durham is not properly analogous: that the steps there begin at its lowest point, while there is no trace of a staircase at the foot of the roundel in the Priory. But, of course, these matters are purely conjectural: there is not enough old stone left to determine the point. From the Crypt of the Refectory the way leads next to another chamber. This, too, is vaulted, a cloistered pillar standing in the centre, and a big fire-place stands in one corner. Towards the St. Regulus's Tower stands, still above ground, the ruins of the Prior's House. The doorway is of the architecture of the 15th century, and there are two separate vaultings not communicating. Turning finally towards the south wall of the Cathedral, you come to the remains of the ambulatory Cloister, and of the monks' dormitory.

NEW CHIMES IN THE CITY.

THE CARILLON AT THE ROYAL EXCHANGE.

IN the heart of the City a familiar, though musical, friend, has at last been silenced. After fifty years of wear and tear the machinery of the musical chimes at the Royal Exchange has ceased to act, and pending the substitution of an entirely new and improved system, no old-time airs will issue forth from the tower surmounted by its grasshopper. There are those who will grieve to learn that out of the four tunes to which the chimes have hitherto been limited, two are to be banished. These are "The Old Hundredth" and "The Roast Beef of Old England." Others may shake on learning that "There is nae luck about the house" is to come back again; for it is recorded that in the great fire of 1838, which destroyed the Exchange, the bells were chiming out this ominous melody at the very moment when the Clock Tower fell into the blazing ruins, crushing in its descent the roof of the Entrance Arch. According to the interesting particulars furnished by Mr. White, the Chairman of the Gresham Committee, there will be ample compensation for the two missing tunes; for the new chimes, which are being prepared by Messrs. Gillett & Co., of Croydon, will consist of a patent carillon machine, with three interchangeable barrels, each barrel playing seven tunes, or a total in all of twenty-one tunes, divided as follows: an English barrel, with seven English airs; a Scotch barrel, with seven Scotch airs; and an Irish barrel, with seven Irish airs. There will thus be an English week, a Scotch week, and an Irish week. The airs selected for the "English Week"—beginning on Monday—are: "God Bless the Prince of Wales," "The Bailiff's Daughter," "Rule Britannia," "O Dear, What Can the Matter Be?" "Tom Bowling," "God Save the Queen," and "When I Survey" (Rockingham). For the "Scotch Week" have been chosen: "Auld Lang Syne," "Kelvin Grove," "Keel Row," "Blue Bells of Scotland," "Ye Banks and Braes," "Nae Luck About the Hoose," and "Hanover." Finally, the "Irish Week" will be given up to: "Believe Me if All," "The Minstrel Boy," "The Last Rose of Summer," "Kathleen Mavourneen," "The Harp that Once," "St. Patrick's Day," and "Abide with Me." The hours of chiming will be as at present, that is, nine in the morning, twelve at noon, and six and nine in the evening. The barrels, as will have been seen, are so arranged that on Sunday a sacred tune will always be

played. The tone of the bells will probably be greatly improved, for the dust and dirt of fifty years are to be removed and hammers of greater weight introduced, besides which the new machinery will be much more powerful than the old.

SAWDUST.

THE Glasgow Town Council has decided to build additional tenements on the balcony system in Mason Street and Collins Street. The probable cost is over £9,000.

THE Cold-air Stores, which have been erected by the Manchester Corporation at a cost of £75,000, were formally opened on Tuesday last.

It is proposed to erect a new Volunteer Drill Hall in Eastgate, Barnsley, at a cost of £4,000, but at present only one-half of the expenditure is to be entered upon. The recent bazaar realised £1,200, and there is the sum of £800 promised.

MESSRS. STONES & GRADWELL, of Blackburn, are the architects for the Higher Grade Church of England School at Blackburn, which is being extended at a cost of £2,500. Additional accommodation will be provided for 220 children.

THE new Church Schools at Chevening, near Sevenoaks, which have been built at a cost of £2,300, were recently opened by Sir William Hart Dyke. Earl Stanhope, who presided, contributed £800 towards the object. There was a large attendance.

It is proposed to place a memorial to the late Lord Tennyson at Somersby, Lincolnshire, the birthplace of the Poet Laureate. An organ is to be erected in the Church, and donations may be sent to the rector, the Rev. Dr. A. J. Skrimshire, Bag-Enderby Rectory, Spilsby.

MR. A. CULSHAW, F.R.I.B.A., has been nominated by the Council of the Liverpool Architectural Society for the office of president, in succession to Mr. Henry Hartley, F.R.I.B.A. The annual meeting of the Society will be held on Monday next, May 5th.

THE class for architectural modelling at the Royal Academy Architectural School has terminated for the session, and a series of eight demonstrations will be given by Mr. Stannus, each Thursday evening from 6 to 8, commencing Thursday next, May 2nd, on "Sub-Panelling and Ceiling Design."

THE memorial stones of a new Mission Hall in Valley Road, Meersbrook, Sheffield, as a branch of the Oak Street United Methodist Free Church, have been laid. Seats are to be provided for 350 persons, at an estimated cost of £1,016.

THE work of completion of the great Roman Catholic Church of St. Francis, Glasgow, is being pushed on very rapidly. The Nave was built about 15 years ago from the designs of the Pugins, and now the Chancel and Chapels are being erected under the direction of the same architects, assisted by Brother Patrick.

THERE was last week a threatened strike of the large number of men employed on the construction of the railway from Laxey to the summit of Snaefell. The men have been receiving 18s. a week for 60 hours; they now demand 21s. for 54 hours. The whole of the men came out on strike, but were prevailed upon to go to work pending a decision of the directors.

A NEW Reredos, designed by Mr. James Brooks, V.P.R.I.B.A., has been placed in St. Peter's Church, Hastings. It extends the full width of the sanctuary, about 26 ft., rises to an extreme height of 25 ft., and is, like its surroundings of Early English design, the fabric being of veined and polished alabaster, save the great central cross, which is of grey Derbyshire dove marble, with a border around it of green mottled Cornish serpentine. The nine figures are all in pure white Castelfino marble. The central group represents the Lord crowned as King of kings and vested in the long pontifical robe of a priest, with arms extended, standing in front of, but not nailed to, the cross. Messrs. Harry Hems & Sons, of Exeter, carried out the work.

"THE RELATION OF PAINTING TO ARCHITECTURE."

A PAPER BEFORE THE ARCHITECTURAL ASSOCIATION.

A MEETING of the members was held at 9, Conduit Street, on Friday, Mr. E. W. Mountford (president) in the chair.

The Chairman read the Committee's nominations for the House List for the ensuing season, as follows:—President, Mr. W. D. Caröe, M.A., F.S.A.; Vice-presidents, Messrs. G. H. Fellowes Prynne and F. T. W. Goldsmith; Committee, Messrs. J. Begg, A. Bolton, A. C. B. Booth, A. W. Earle, O. Fleming, C. de Grachey, F. G. F. Hooper, Hon. A. McGarel Hogg, W. B. Hopkins, H. Huntly Gordon, G. A. Lansdown, Theo. Moore, E. W. Mountford, A. B. Pite, H. A. Satchell, W. H. Seth Smith, E. H. Sim, and E. Woodthorpe; Hon. Treasurer, Mr. H. W. Pratt; Hon. Librarian, Mr. J. W. Stonhold; Hon. Secs., Messrs. B. J. Fletcher and A. H. Hart; Hon. Solicitor, W. H. Jamieson; Hon. Assistant Librarians, Messrs. C. H. Freeman and E. W. H. Wonnacott; Hon. Auditors, Messrs. E. H. Sim and G. W. Buss, and Assistant Sec. and Registrar, Mr. D. G. Driver.

Mr. C. W. Whall then read a lengthy but highly interesting paper under this head. He said the question of the relation of painting to architecture was the question of the relation of all the other arts to architecture; and, therefore, remembering their definition of art, all crafts, however humble, which set before themselves the pursuit of beauty. He thought it would be useful before turning their attention to so complicated a thing as painting to spend a few minutes in looking at the question in a simple form, by considering one of the lesser crafts over which architecture extended its direction. He instanced iron-work, and asked them to consider how completely the virtue proper to each of its two great processes governed the design and decided its relation to architecture, both as to pattern and place. He advocated the learning by all architects of a craft so as to bring them more in sympathy with the crafts. With regard to painting, he expressed his firm conviction that the one great peculiar characteristic virtue pertaining to the art was the definition and exquisite laying on of paint. Small, simple, half-contemptible as this might seem, it was the only key to the study of the art of painting; and he directed their keenest attention to it in order that they might be able to search for this quality in pictures, and know it when they found it. He quoted in some detail Veronese's "St. Helena," in the National Gallery. The peculiar virtue of sculpture was noble form, as that of painting was splendid colour. In painting it was that swift sensitiveness of touch which he had tried to describe in Veronese, and in sculpture the same thing was true. He insisted strongly on technical skill, and said a work of art which appealed for manifest technical shortcomings to the lamely-expressed goodness of its purpose, damaged more than aught else could do the cause it pretended to advocate. He illustrated the resources of painting by a series of tints, and gave examples of the effects to be obtained by the varied handling of one colour (burnt umber), and white. He strongly advocated the working in a given key, and when they had a mansion or a church to decorate, they must tell the artist what keys of colour would harmonise with their intentions, and what pigments he might use. They must remind him that they were masters of the situation, and that he must do as he was told. They would thus get some valuable, or, at any rate, emphatic information on the relationship between painting and architecture. The arts were seeking to found themselves on the fine forms of craftsmanship proper to each, rather than on academic theories and vague forms of dreaming. The tendency of the arts at present was to specialise themselves, and though it might be feared that it was their tendency also on that account to isolate themselves, the conviction was growing that in the searching after the special and individual excellencies of each, craft was being, in reality, discovered, and proper ground on which they could all unite. Architects by their study of the noble art which they had chosen to be

their life's work, were preparing to stand in the place where, by the nature of things, all those various arts rapidly coming together must meet. They met in virtue of their common motive—beauty, and their common passport to that enchanted ground was craftsmanship. This age had been too much swamped and stifled by academic methods of study, and it was certain, that for a long time yet, much instruction must be given in this way, yet he urged on them all to take every chance that offered of learning at the bench or on the scaffold, at the anvil or at the easel. Turning to the field of modern painting, he said cabinet pictures, he was happy to tell them, were a drug in the market, and very soon all the jarring schools would be clamouring round architects for employment. Indeed, if he lived for another twenty years he should expect and thankfully rejoice to see architecture the acknowledged leader, ruler, and guide of all the arts in this country. He reminded them that old forms of painting were being much challenged now; new forms were being started and people were liable to be carried away by the new as the only right thing. They were afraid of being called "old-fashioned" if they do not. The doing of a difficult thing was not a work of art. The Forth Bridge was the greatest triumph over difficulty that the science of building had ever gained, but it was not a work of art, simply because it was built without a thought of beauty, and because it was not beautiful. He referred to what he described as the "lamentable divorce between the sister arts," which had left the cabinet picture to become the isolated and irresponsible thing it had, and which must sink into the position of a counter in the speculations of the market rigging and conscienceless dealer. The reason why he was happy to tell them of the decline of the cabinet picture was not his objection to cabinet pictures as such, but only as the spirit of the age had made them. It was for architects to help them by taking a lively interest in the union of arts in which lay all their future hope, and by showing them the possibility of surrounding themselves with beautiful things generally to make it impossible for the beautiful plant of Art to make its only failure in that which was the crown and flower of all, by painting, which so lamentably missed its mark. Painters as a rule had valued skill and technique in proportion as they were seekers after beauty; and he named Burne-Jones, Watts, Albert Moore, Leighton and Whistler, as the very men amongst painters best fitted to associate themselves with architectural art in the capacity of decorators, for in truth they were seekers after beauty. Let them not imagine that all he meant by "decorative" was the art which was usually now alluded to under that name. All the finest art was decorative, Veronese no less than Giotto, and what could be more reposeful and perfect and "liveable" than an eighteenth century room, with the rich warmth of Reynolds and the severe grace of Gainsborough amongst its slender mouldings and its dainty white and gold. He did not want them to seek for art that was very flat, with a brown outline round the faces, and with no shadows; but what he did urge them to seek for was art where beauty has been the aim before realism, glorious colour before deceptive light and shade, and graciousness, sweetness, dignity and repose before dramatic fervour, show, excitement, and fuss. Upon architects fell the honourable but responsible task of directing the accessory arts, and it was with a real joy that painters saw so many of them now seriously setting themselves to learn them. They would find, in doing so, even if they only learnt one, the grounds for a sympathy with their brothers in art to which they had hitherto been strangers. And depend upon it, said Mr. Whall, when masonry, when timber and glass and metal and mosaic and sculpture and painting, were each advanced to their own proper perfection and completion; and when being so, they were brought under the direction of a master builder whose knowledge of, and sympathy with, their various excellences had largely helped to make them what they were, they would soon cease to hear that painters had "no style." If once the various crafts were used in perfection and used in association they would soon form their own right style,

and being used in sympathy also they would combine to form one harmonious style for the whole range of the arts. Speaking generally, he ventured to think that their past history showed that the arts had ever attained the highest perfection of all, when, even beyond the attainment of physical beauty, they recognised yet another motive still, and referred all their efforts to the standard of a high and noble conception of the whole of human life, domestic, civic, patriotic, and religious in its completeness and its dignity. The lecture concluded with the following words: "You builders of our temples and our halls and our homes, you students of our ancient glories, help us to recover that lost inheritance. When you apply to us to join with you in your efforts, do so in this spirit, and let us together apply whatever we can win back of the felicities and dexterities of our noble arts, in portrayal of things worthy of them—the great verities of life and being, in the reiteration of the unchanging voice of human aspiration, the affections of the heart that never grow cold, the thoughts that never die. I have put before you two things—the technical and the ideal. Both necessary. The one is fine art, the other is fine life."

Mr. Halsey Ricardo said Mr. Whall had laid great stress on the pursuit of beauty, but he thought it required a little caution. If they deliberately went for beauty, they might get a sort of beauty, but the standard and area of beauty were always changing and becoming enlarged and modified. A very fine piece of fresh work added something to the appreciation of beauty, but beauty should not be foremost in a man's mind. With regard to the question of technique, Albert Moore went deliberately and steadily for beauty and technique, and it had had the result of making his girls look very sleepy, who began the morning with toffee and caramels, and did not know what to do with themselves. On the other hand, they could have pictures pitched in too high a key, and they were exhausting. He had very great pleasure in moving a vote of thanks to Mr. Whall for his interesting paper, but he should just like to supplement it with the idea that beauty and technique were intolerable in themselves, and that they should not be pursued for themselves directly.

Mr. Statham said he thought that the paper, with which he agreed entirely in sentiment, had taken rather an exclusive view of painting as a decorative adjunct to architecture. When they did use it as such, they must architecturalise it, not only in line, but in subject and expression. He did not agree with Mr. Whall that the cabinet painting was dead. It seemed to him that there was something to be put into a painting which they could put into a cabinet picture and which they could not put so well into an architectural painting. An artistic fallacy which had been very much accentuated lately was that the only object of a picture was its decorative object; and one result of that was that painters were losing the power of indicating character in the way they used to do. He thought artists were in danger at the present day in the pursuit of pure beauty of losing what after all was a still higher function of painting, i.e. giving them an intellectual idea—one sprung from the artist's brain; or else giving them a new and vivid idea of some feature. That was where he thought they all failed now, except Mr. Orchardson, whose pictures were works of art and criticism of life. Given a picture in which they were entirely free from any necessity of considering the surroundings, there ought to be something with an insight of human life in it, and that really went higher than merely decorative work. Where they had to work upon a wall, they must consider that beauty of line was the first thing, and that human character must be a little kept in the background in order to give the repose necessary to harmonise with the architecture.

Mr. Pryor said the last two speakers had thrown a film of doubt over Mr. Whall's propositions, which, he thought, was largely due to their adaptation of the word "beauty." It seemed to him that Mr. Whall had given them an Architectural treat. He thought the purpose of his definition of the art of painting was that its sphere lay in the noblest emotions, and that it did not lie in the sphere of intellect,

and that for a painting to be a permanent work of art, it was necessary to appeal to the noblest emotions. He did not think that art could claim to be the mother of arts.

Mr. Fellowes-Pryne seconded the vote of thanks and said he thought there was just one little remark which might be added to Mr. Whall's, and that was as to having suggestions from a painter's point of view as to the application of decoration to architecture. He thought they could not but feel that much of the shyness the public had in taking advice from a painter or an architect for decorative work in churches and large buildings, was because of the failures which existed and which were caused principally, he thought, through the lack of knowledge of the architects and want of knowledge of the way colours contrasted and harmonised with one another. He agreed with Mr. Whall's idea of making rough models of their plans, so as to see all round the subject. The more architects got into touch with painters and the more painters got into touch with the architects, the more likely were they both to succeed in the future.

Mr. Whall, in reply to the whole discussion, said he did not think paintings with high ideals were exhausting, but, on the contrary, that they were stimulating. In dwelling upon the necessity of technique, he was only speaking of it as a necessary to the ideal perfection of painting, but still, pictures might have a great charm without rising to that standard.

The motion having been carried, the meeting terminated.

THE CENTRAL HIGHER SCHOOLS, SHEFFIELD.

NEW BUILDINGS.

LAST Friday evening, Sir George W. Kekewich, K.C.B., the Secretary of the Education Department, opened the new buildings which have been erected in connection with the Central Higher Schools, Sheffield. The Central School was opened by Earl Spencer in 1880, and, including the adjacent Bow Street Elementary School, was designed by the late Mr. J. B. Mitchell-Withers, architect. Since his death, the work has been completed under the direction of his son, Mr. J. B. Mitchell-Withers. The architecture is of the Italian Renaissance style, carried out in harmony with the adjoining buildings. The accommodation provided comprises, on the ground floor, machine-drawing room for 131 students, with adjoining lecture room for 72 students. On the same floor also are the physical laboratory and lecture room adjoining, for 50 students. The first floor is devoted to chemistry, and the fine laboratory, with open timber-roof, is subdivided by glazed screens, for 72 "elementary," 54 "advanced," and 12 "honours" students. Opening from the "advanced" laboratory is the balance room, with substantial stone tables. The laboratories are fitted with the latest type of benches, with sinks, gas and water supplies, and fume closets on the benches. Larger fume and draught closets are provided along the side walls, with glazed cupboards, for reagents. The chemical lecture room provides accommodation for 100 students, and has adequate preparation, teachers, and dark rooms opening out of same. In the basement (only partly below the ground) provision is made for wood and metal work shops, and adjoining are the engines and dynamos for electric lighting, ventilation, and provision of power for machinery. On this floor, also, are the boys' dining rooms, and the department where instruction in laundry work will be given. The heating is by hot air passed through a fine water spray and wet screens, and driven by powerful fans through air ducts to the various portions of the buildings, where its admission to the different rooms can be regulated. The whole School is well lighted by electricity, which has been carried out under the direction of Professor Watkinson, of the Glasgow Technical College, who has paid special attention to the plant being suitable for teaching purposes.

It has been decided to purchase the Longfield House Estate, near the present chapel, in Hammerton Street, Pudsey, for £1,150, as a site for the proposed new Primitive Methodist Chapel.

LONDON AND PARIS.

AN ART COMPARISON.

NO one, with full knowledge, ever thinks of maintaining that London can compare with Paris, not merely in painting but in sculpture and the arts of decoration. Acres of painting are produced for every Royal Academy, but the canvases which are tolerable, even by our standards of excellence, are few. With us, as with the French, there is fortunately an originality which has revolted against the banality and narrowness of the reigning clique. But its energies, whether we take the New Gallery, or the Grosvenor, or the New English Art Club, are very modest in comparison with the splendid exhibition of master-work at the Champ de Mars, and its unrest, in its wildest moments, falls far short of the splendid madness which has made the "pointellistes" and the "tachistes" of Paris the discoverers of a new realm. This pre-eminence of the French capital is the more extraordinary because a very large proportion of its good work is done by foreigners, and some of the best is done by artists of English speech. The keenest spirits of the United States, the young members of the notable Scottish school, and not a few of the cleverest English artists, have made their home in the "City of Light." Like Mr. Whistler, they learn all that the French tradition of high craftsmanship can teach them, and they add to it a certain strenuous character which the French critics themselves welcome as a healthy and a powerful influence. The number of really French painters of the first rank who are now exhibiting in the Champ de Mars is equalled or perhaps exceeded by the number of foreign names acknowledged even in Paris to be eminent. Whistler himself does not exhibit, but Sir E. Burne-Jones has sent a portrait which, for a certain sobriety of tone, is better work than for a long time, and Mr. Stott, of Oldham, sends two clever things. The Scottish school of portraits is admirably represented by Mr. Guthrie's most convincing personalities and by Mr. Lavery's portraits of ladies. America yields Mr. Alexander's essays in another branch of the Whistlerian manner, Mr. Rolshoven's strong work, and Mr. Shannon's remarkable "pianist." In work other than portraiture, the United States can take credit for Mr. Dannat as a colourist, for Mr. Lucas and his masterly nudes, for Mr. Alexander Harrison's always interesting studies of dark seas and waters, for Mrs. Lee Robbins's tricky graces, and for many more. Craftsmanship in art has reached such a height in the Parisian schools that a standard of technical excellence, which is very rare in London, is all but universal at the Champ de Mars. The crude work to be found in every Royal Academy seems incredible to anyone who walks with a discerning eye through the rooms where the spirit of M. Puvis and M. Dagnan, the inspiring legacy of Bastien Lepage have left their effect. Why should Paris be so full of strong effort and high attainment, and London on the whole so barren of all but the commonplace in painting? Surely the remuneration of the painter is far greater here. The nation and the city in France are patrons of art on a great scale, and though the individual prices they pay are notoriously small, they are enhanced by the knowledge that the selection is almost always made on competent artistic advice. At the same time, any artist, even the youngest or the most original, who does eminent work, leaps at once to a position of dignity and honour. With us, public patronage and recognition is neither generous nor well bestowed. Private patrons spend immense sums, but the result is rather to debase art than to stimulate it, and the effect is to turn some of those who might be our masters into mechanical and meretricious tradesmen. The evil is not merely a question of the studio and the salon; it affects the whole national life. We are the poorer in all our thought and character, the grosser in our aims, the narrower in our judgments, for lack of some of this serious effort after beauty.

THE Harrogate Town Council has decided to proceed at once with the erection of a new pump-room for supplying the magnesia and some of the chalybeate waters.

THE GUILDHALL PICTURES.

MANY fine works are to be found in the Loan Collection of Pictures at the Guildhall Art Gallery. They will afford pleasure to connoisseurs, as much as to busy City men. The large room contains important pictures by English artists, of whom all but O'Neil and Vicat Cole are still living. In the second room are pictures of earlier execution by existing artists, by some deceased British painters, and four examples of Mons. Gérôme's art. The third room—richest of all—is occupied by exceptionally fine Dutch works, if we leave out of account two not very alluring Sir Joshua's. There are not, perhaps, many strangers even in the Flemish section, as Lord Northbrook's almost incomparable Metsu, "The Intruder," and his no less extraordinary Jan Steen, "Portrait of the Artist," were at the Old Masters in 1889, while the Queen's splendid Metsu, "The Violoncello Player," was there in 1876 and again in 1893. But her Majesty's Jan Van der Meer (or more correctly, Vermeer), of Delft—that very rare master—is all the more welcome that it permits comparison with the Vermeer acquired by the nation two years ago, not much to the disadvantage of that in Trafalgar square. Earl Spencer contributes his magnificent Rembrandt, "Portrait of Rembrandt's Mother." There are two brilliant Terburgs, the one owned by Mr. W. Harvey being specially notable for all Terburg's virtues, although his social subjects are ordinarily of higher class life than this "Sleeping Soldier" being "tickled with a straw." A little Gerard Dow, lent by Sir Francis Cook, is "An Old Woman," capital for its flesh painting, finish, and transparency. These are but a few of the best, for the Dutch room is rich in *genre*, in portraits and in landscape. It is scarcely invidious to the rest to assert that "Orlando Pursuing the Fata Morgana," by Mr. G. F. Watts, is the jewel of the first gallery. It is lent by the Corporation of Leicester, and seems to have become even richer in colour since it was at the New Gallery five years ago. Neither Mr. H. W. B. Davis nor Mr. Val Prinsep is often seen at so high a level as in "In Ross-shire" and "At the Golden Gate," both of which were at the Royal Academy the same year. That landscape, by Sir John Millais, "Over the Hills and Far Away," which is so well known by an etching of it, is now well nigh a score of years old, but still more interesting are his figure pictures of a decade earlier—"Jephthah," lent by Lord Armstrong, and "Rosalind and Celia"—though it would appear as if Sir John had painted the bole and roots of a beech tree, but scattered its dead leaves as oak. Sir Frederick Leighton is best represented by that wonderfully beautiful design and colour harmony, "The Garden of the Hesperides."

THE Government has approved the plans for rebuilding the Old Bailey, and steps will shortly be taken to carry the plans into effect.

At a meeting of the committee of the Carlyle's House Purchase Fund, held on Wednesday at the British Museum, it was announced that the amount subscribed or promised, after deducting sundry expenses paid, was £1,722. The committee hoped to be in a position to complete the purchase and carry out indispensable repairs next month, so that the house might be opened in June.

At the meeting of the Mersey Docks and Harbour Board on Friday last, it was decided to fill up a portion of the water space on the south side of Stanley Dock and build thereon additional warehouse accommodation for the storage of tobacco at a cost not exceeding £170,000. In the discussion particulars were given of the tremendous increase in the tobacco trade during the past few years.

THE new School buildings erected at King's Heath for the King's Norton School Board, at a cost of £5,633, were opened last week. A new junior mixed School or fourth department has been provided adjacent to the late infants' School, which has been transferred to the mixed juniors, the infants being provided for by the erection of a new infants' School fronting to Institute Road. The work has been carried out from the designs and under the supervision of Mr. Edward Holmes, architect, and by Mr. R. Merton Hughes, contractor.

BIRMINGHAM'S NEW HOSPITAL.

"ONE OF THE FINEST IN THE KINGDOM."

GREAT satisfaction has been expressed by those who have been over the new Small-pox Hospital, erected and furnished at Little Bromwich at a cost of something like £41,000, to serve Birmingham. The City Council held an official inspection, and found the Local Government Board's high tribute thoroughly justified. The new institution stands on a site about 24 acres in extent. The buildings, both for the patients and the administrative department, are divided into well-separated blocks, and have been erected of red and blue bricks, with red tiles, without any special attempt to achieve an architectural effect. On passing through the gates, immediately on the right is the entrance lodge, a red brick building relieved with stone, with half-timbered gables and a covered porch and vestibule communicating on one side with a reception room for visitors or others making enquiries, and on the other with the porter's residence. The receiving ward, which is the first of the Hospital buildings, consists of a single room, with a bath-room leading therefrom, and a small enclosed yard and offices. Here the patients are examined and stripped of their clothing, which is sent to the disinfecting station to be purified before being placed in the store connected with the discharging ward. The patients are then either taken direct into one of the pavilions to undergo treatment, or, if any doubt exists as to the nature of the case, they are placed in the isolation or quarantine pavilion, and kept there for further observation. The isolation pavilion, situated on a bye-road, is arranged for males and females, and consists of a number of small wards with one, two or three beds in each as required, and access to each ward is obtained from the open air, but under a covered glass verandah. Special bathing and other sanitary arrangements are made, all securing perfect isolation. The official and administrative block is sub-divided into three sections, the central containing the medical quarters and matron's apartments; the left section the steward's apartment and stores, mess room, kitchen and kitchen yard; and the right section the servants' accommodation and recreation room, the matron's stores and the official laundry. The various departments are admirably arranged, so that whether stores, food, or medicines are required, they can be delivered from the lobbies to the attendants or nurses without it being necessary for them to enter the building. The pavilions for the patients are four in number, and each consists of two wards, 72 ft. by 30 ft., providing accommodation for 24 beds, and allowing air space to each patient of over 2,000 cubic feet. At the ends of the wards are the bath-rooms and lavatories, and the wards are connected by an entrance hall, with a duty-room overlooking each ward, pantry, store-rooms, &c. Ample provision has been made for the servants by the erection of cottages; at the extreme rear of the site is the laundry and disinfecting yard with incinerator, perfect isolation being preserved all through; and the discharging ward, a small two-storied block, stands near the lodge at the entrance. The Hospital is complete in its equipment, even to the minutest detail, and the Committee not only have an institution which the Local Government Board say is one of the finest in the kingdom, but a Hospital standing in so healthy a district that, instead of remaining on the average six and a half weeks, as formerly, it is believed the period of a patient's detention will be reduced by at least a week.

The foundation-stone of the new Church of St. Lawrence, Barton, near Preston, has been laid by Viscount Cross, G.C.B., and the new building, which is to be erected at a cost of £5,000, is to take the place of an older building, practically on the same site, which existed before the Reformation, and of which mention was made in 1577.

It is proposed to erect a Boys' School and a Social Club and Institute in connection with St. Augustine's, Monsall. The buildings, which are expected to cost about £3,000, are to be constructed upon a plot of land near the Church, presented for the purpose by the Dean and Canons of Manchester.

THE SANITARY CONFERENCE AT MANCHESTER.

ARTISANS DWELLINGS: THE LIGHTING AND SANITATION OF ELEMENTARY SCHOOLS.

A THREE days' Conference on Sanitary Progress and Reform, was held at Manchester, on Wednesday, Thursday, and Friday of last week. Sir H. E. Roscoe, M.P., presided, in the absence of Sir Henry Rawlinson, late chief engineer to the Local Government Board, who should have delivered the inaugural address, but whose indifferent health prevented his being present.

On Wednesday many papers were read, some of a purely sanitary nature. Smoke abatement came in for much discussion, being very much needed in Manchester.

Speaking on artisans dwellings, Mr. Walton Smith remarked that he knew they were high, and he knew the difficulty and inconvenience experienced by aged people and small children in ascending the steps to the higher storeys. That condition of things, however, arose out of the operations of the Local Government Board. When the Manchester Corporation approached the Board with respect to the areas which were declared to be insanitary they were obliged by the Local Government Board, where they removed insanitary property, to provide proper accommodation for the number of persons who were displaced. They could not, as would be seen, accommodate the same number of persons on, say, two acres of ground that was previously overcrowded, and where the death-rate went up as high as 50 per thousand, giving each proper breathing space, without increasing the number of storeys in which those people were to be located. The people who resided in the buildings did not grumble. He had personally made inquiries from the residents, and found that they were satisfied. The number of occupants was increasing; but he should be glad if, in the future, they could make some arrangements whereby buildings of such a height could be avoided. On the Sanitation of Elementary Schools, Dr. G. H. Bailey (Owens College) described the results of examinations of the air of certain elementary Board Schools in Manchester, and Salford, facilities having been granted by the respective School Boards for making the necessary observations. Although the weather when he made his observations was such that the windows could be kept open the whole of the school time and were so kept open, he found, even in the large rooms at Webster Street and Grecian Street School, which were the most favourably circumstanced, there was a very distinct odour, whilst in the classrooms the air was very oppressive, giving rise to headache when it had to be endured for a period of half an hour together. At Lloyd Street, St. Stephen's, and Granby Row, matters were distinctly worse; the excess of carbonic acid gas was as a rule 12 to 15 in 10,000, and the odour, in the classrooms especially, simply unbearable. On dull, moist days the temperature within and without was practically identical, and hence there was a very limited circulation; the air was then worse than on fine, clear days. On such days the odour was very pronounced. It was clear that even under favourable conditions the fresh air supply was too limited. Mr. E. Hewitt followed with a paper on the systems of warming and ventilation of schools, and Mr. W. Spinks (Yorkshire College, Leeds) contributed one on the drainage and general sanitary arrangement of schools. Dr. Emrys Jones then read a paper on the lighting of schools. He said that taking the schools in Manchester and Salford of all kinds and classes, he had no hesitation in saying that not 5 per cent. of them would stand a most moderate test of efficiency in the question of lighting. Many of them seem to have been built without the slightest regard to the use to be made of them for the instruction of young growing children. The principal evils arising from this condition of things were short sight, weak sight, and spinal curvature. Dr. Jones quoted from the investigations of Dr. Cohn, of Breslau, Professor Pflüger, and other authorities who had investigated the subject to show the great evils arising from the neglect of proper pre-

cautions as to the lighting of schools. He said instances might be indefinitely multiplied of the grossest violation of the simplest rudiments of hygienic laws and yet our children were forced to attend and be "educated"—he must be pardoned for using the term—under such conditions. It was surely time that an intelligent democracy should see the absolute futility of making the election of those responsible for school management a question of politics or of whether a candidate was for Church or Chapel. What was wanted was to find intelligent men who appreciated and understood the laws of health, and who, at all costs, would see that they were applied. All the best authorities were agreed that the best aspect for windows was east or west. He urged the adoption of the electric light in schools.

At the Conference on Thursday, one section was devoted to indoor and outdoor recreation, and another to woman's work in sanitary reform. There was also as a part of the gathering the opening of a Conference of District Councils for the Registration of Plumbers in the Northern and Midland Counties. The Conference on recreation was presided over by Mr. Herbert Philips. The Earl of Meath sent an interesting paper on open spaces, and Cardinal Vaughan sent a paper on "The need of winter recreation halls for the poorest localities." His Eminence said the fact that the local authorities had the power to provide elevating amusements and pleasures out of the rates showed that the bearing of these things on the health, comfort, civilisation, and moral welfare of the people had been duly recognised by law, as well as by common-sense. He suggested, as a tentative proposal, that somewhere within reach of the poorest quarters of one of our great cities, the civil authorities should build or provide space for a large winter garden or winter recreation hall, capable of accommodating 500 to 1,000 people, and that in this area, well heated and lighted, music and entertainments should be organised on certain evenings of the week.

At the closing session, on Friday, Sir B. W. Richardson delivered an address on the sanitation of the past, with ideals for the future. Having traced the advance of sanitary science that had marked the last fifty years, he said his first ideal was a national main drainage system, together with a better system for the disposal of refuse. In connection with the management of the sick, he advocated the universal provision of hotel hospitals, the use of which would obviate the necessity for the treatment of the sick at home. He developed an elaborate scheme for the ventilation of towns, the purification of the atmosphere, the acquisition of pure water, and reform in the matter of food supply. With regard to the disposal of the dead, he expressed himself as being favourable to cremation, and thought that, at all events, it ought to be supported. He insisted that sanitation should become the first part of the national learning. Education in the first principles, he said, demanded the fulfilment of all details. He did not mean education as the word was generally understood, but education in the laws of life and organisation, and in those secondary forces which we called social and economical.

A BLOCK of Municipal Buildings is being erected at Holywell for the use of the Urban District Council. Mr. Lloyd Williams, of Denbigh, is the architect, and Mr. Abel Jones, of Rhyl, is the contractor.

A SCHEME has been drawn up for the establishment of a county Museum for Lincolnshire. A Lincolnshire Naturalists' Union has been formed and a county herbarian brought together. To carry out the scheme £25,000 will be required—£5,000 for the building and appliances, and £20,000 for the endowment fund.

THE Duke of Devonshire has contributed £100 towards the fund for the Restoration of Whittington Parish Church, near Chesterfield. Plans have been prepared by Messrs. Rollinson & Son, of Chesterfield, for restoring the structure. It is proposed to reduce the accommodation from 650 to 375 sittings, other alterations being effected during the restoration.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in *THE BUILDERS' JOURNAL*, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would in particular, desire to call our attention.

Clark Memorial Hall, Paisley.—The Mission Hall in connection with Thread Street U.P. Church, Paisley, has been enlarged and was opened on the 21st inst. The Hall is lighted by fourteen long windows, and these have been filled with stained-glass by Messrs. Stephen Adam & Son, Glasgow, and is seated to accommodate about 450 people, and heated by hot water pipes. The elevation from the street is two stories in height, and the style of architecture is in harmony with the adjoining Church. Part of the lower story is utilised as a manager's room and session-house, each room being about 18 feet square, with lavatory accommodation connected; while the upper flat has been arranged as a house for the church officer. The contractors were:—Builder, Mr. George Henderson; slater, Mr. Charles Wallace; joiner, Mr. James Dunlop; plasterers, Messrs. John Fraser & Co.; painters, Messrs. Cowan & Stewart; gasfitters, Messrs. George Robertson & Son—all of Paisley. Mr. James Donald, of Paisley, was the architect.

Balmoral Hotel, Edinburgh.—Extensive additions and alterations have recently been made at this building, consisting of a very fine new dining-room, 55 by 53 feet, assembly or dining-room, 58 by 27 feet, writing-room, thirty visitors' and ten servants' bedrooms, lavatories, remodelled kitchen and serving rooms, new American "Otis" Elevator, remodelled bar and restaurant, &c. The work has cost over £9,000, and has been carried out by Mr. J. Macintyre Henry, architect, Edinburgh.

New Board Schools in Wales.—Two Board Schools, one at Pontypool the other at Cwmffrwdor, have been opened by the Trevathin School Board. Both Schools were built from designs by Mr. E. A. Lansdowne, of Newport, Mon., and cost about £10,000. That at Pontypool, which is Gothic in style, is built of blue Pennant stone sills with buff brick dressings and Bath stone, and corbels. The large room is 89 ft. by 20 ft., and the infant-room, 21 ft. by 18 ft. The builders are, Messrs. Morgans & Evans. The School at Cwmffrwdor is also built of blue Pennant stone, and is designed class-room fashion, with glazed doors, so that the whole of the rooms are visible from one point. The builder was Mr. A. H. Bailey, Pontnewynydd.

Diary and Directory, for the use of Surveyors, Auctioneers, Land and Estate Agents.—A well-arranged volume, providing a diary of one page for every day, ruled pages for cash account. There are directories of members of the Surveyors' Institution, the Auctioneers' Institute, of county surveyors, principal bill-posters, and an auctioneers' land and estate agents' directory for London and the provinces. Also an abstract of Acts of Parliament and an account of local customs in England and Wales as to land tenure, &c. Besides this there is a mass of carefully-selected information and tables of special interest to all in any way connected with land and house property. London: *Estates Gazette* Offices, St. Bride Street, E.C.

Oldacres & Co.—Where to get a number of copies of Bills of Quantities, Specifications, &c., at a reasonable price, has always been a

question with architects and surveyors. Lithography (and similar methods) is expensive, but we can recommend the work executed by Messrs. Oldacres, of 59, Chancery Lane. The cost is 50 per cent. cheaper, and the efficiency is proved by the large amount of work they always have in hand.

SOCIETY MEETINGS.

Liverpool Ruskin Society.—The last general meeting of this society for the present session was held on the 22nd instant in the Free Library, William Brown Street, and, despite the unfavourable weather, was pretty numerous attended. Mr. E. J. Baillie, the president, occupied the chair, and the feature of the evening was a paper read by Mr. Conrad Dressler, its subject being "The Curse of Machinery," in which the author endeavoured to set forth the ugliness, from an artistic point of view, brought about by machinery without corresponding advantages. The paper, which was a repetition of one read to the Birkenhead Literary Society in January last, seemed to be much appreciated.

The Society of Architects.—A special general meeting of this society was held at St. James' Hall on Tuesday evening last, the president, Mr. E. J. Hamilton, being in the chair. It was resolved after some discussion that the list of examinations recommended by the Council be accepted as alternative, either wholly or in part, to the examination for the membership to be established by the society. It was also resolved that on and after November 1st next the entrance fee for membership be two guineas instead of one guinea as at present. At the close of the special meeting an ordinary meeting was held, and Mr. Henry Lovegrove, F.R.I.B.A., read a most interesting paper on "Housing the People in London and the Provinces."

Liverpool Engineering Society.—A meeting of this society was held in the Royal Institution, Colquitt Street, on Wednesday last. Professor Hele-Shaw presided, and there was a large attendance. The principal item of the evening's proceedings was an adjourned discussion on the paper read at the previous meeting, as the joint production of Mr. F. G. Baily and Dr. C. A. Kohn, on "A Scheme for the Distribution of Energy in Towns." Mr. Arthur J. Maginnes, who has been filling the position of senior vice-president, was nominated for the position of president.

Manchester Society of Architects.—The annual meeting of this society was held at the house of the Literary and Philosophical Society, George Street, the president (Mr. John Holden) in the chair. After the annual report had been adopted the following members were elected as Officers and Council for the coming session:—President, Mr. John Holden; Vice Presidents, Mr. John Ely and Mr. R. Knill-Freeman; Hon. Secretary, Mr. Paul Ogden; Assistant Hon. Secretary, Mr. Edward Hewitt; Members of Council, Messrs. R. I. Bennett, A. H. Davies-Colley, T. Chadwick, R. Knill-Freeman, F. Mee, J. D. Mould, W. A. Royle, E. Salomons, J. H. Woodhouse, and T. Worthington; Members of Council-associates, Messrs. J. S. Hodgson, H. E. Stelfox, and P. S. Worthington; Auditors, J. W. Beaumont and C. H. Heathcote; Education in Architecture Committee, Messrs. A. H. Davies-Colley, John Ely, F. Mee, J. D. Mould, G. H. Willoughby, J. H. Woodhouse, P. E. Barker, G. Brown, T. Hesketh, J. S. Hodgson, H. E. Stelfox, and P. S. Worthington. Mr. C. R. Locke, Mr. Joseph Nodal, and Mr. Joseph Swarbrick were elected Fellows, and Mr. C. D. Rochester and Mr. F. J. Almond were elected Associates of this Society.

The Institution of Civil Engineers.—The ordinary meetings during the present session will not be held, owing to rebuilding of the premises. The special meeting on Thursday and the annual general meeting on May 28th will take place at the Royal United Service Institution.

THE Duchess of Teck visited Malvern on Wednesday, and opened the new waterworks, which have been constructed at a cost of £60,000.

CURRENT PRICES.

TIMBER.

K H B	4	× 11 1st & 2nd Yellow...	per Std.	£18	0	0
D O M	4	× 11 3rd	"	"	15	10
P B W	4	× 11 5th	"	"	9	15
S K B	4	× 9 1st & 2nd	"	"	15	15
P T W	4	× 9 3rd	"	"	13	10
↑ ↑ ↑	4	× 9 5th	"	"	10	0
M G & Co.	3	× 11 1st (Gromme) Yellow	"	"	14	10
N S A	3	× 11 2nd	"	"	14	10
D × M	3	× 11 5th	"	"	8	10
	3	× 9 1st Onega	"	"	16	10
B S 1st S C	3	× 9 1st	"	"	15	0
D D D	3	× 9 3rd	"	"	13	0
H A B	3	× 9 3rd	"	"	13	0
D M	3	× 9 4th	"	"	10	5
R S S	3	× 9 3rd	"	"	9	15
M F D	3	× 9 5th	"	"	9	0
* * *	3	× 9	"	"	7	10
W S N	3	× 9	"	"	5	0
S K B	3	× 8 1st	"	"	12	5
B A T	3	× 8 1st & 2nd	"	"	8	5
S K A	3	× 7 3rd	"	"	10	0
H A B	3	× 7	"	"	8	5
OBOLA	2	× 9 1st	"	"	11	10
G W W	2	× 9 4th	"	"	10	0
H H H	2	× 8 u/s Yellow	"	"	8	0
	2	× 7	"	"	8	5
	2	× 6	"	"	7	10
	2	× 5	"	"	6	15
	2	× 4	"	"	8	0
	2	× 7	"	"	8	10
F R A	3	× 11 1st White	"	"	10	10
* P *	3	× 11 2nd	"	"	8	0
E F A	3	× 9 1st	"	"	9	5
J A S	3	× 9 2nd	"	"	7	15
	3	× 9 1st Spruce	"	"	10	0
	3	× 9 2nd	"	"	7	10
	3	× 9 3rd	"	"	6	15
	3	× 11 1st Pine	"	"	26	0
	3	× 11 2nd	"	"	17	10
	3	× 11 3rd	"	"	10	10
H H H	1 1/2	× 7 1st Yellow	per Sq.	0	14	0
D D D	1 1/2	× 7 3rd	"	"	0	13
S B S	1	× 7 1st	"	"	0	11
S A B	1	× 7 2nd	"	"	0	9
S-TERTIA	1	× 5 3rd	"	"	0	7
J F J	1/2	× 6 mixed Yellow	"	"	0	8
Oregon Pine	...	...	per Std.	£12	to £15	
Pitch Pine	...	...	...	£11	to £12	10s.
"	"	fresh sawn	...	per load	40s.	to 52s.
Ash	"	...	...	...	45s.	to 52s.
Mahogany, Honduras (logs)	...	...	per ft. sup.	3d.	to 6d.	
"	"	(large & prime)	"	...	9d.	to 2s.
"	"	Tabasco	"	...	3d.	to 5d.
"	"	Panama	"	...	3d.	to 5d.
"	"	African	"	...	2d.	to 7d.
"	"	(large & prime)	"	...	8d.	to 2s.
"	"	Cuba	"	...	3d.	to 5d.
Cedar, Cuba	...	...	...	...	3d.	to 5d.
"	"	Mexican	...	...	3d.	to 3d.
Sequoia (clear)	...	...	per ft. cube	ms. rod.	to 2s.	3d.
Birch Planks	...	...	...	...	1s.	to 1s. 3d.
Beech Planks	...	...	...	...	9d.	to 1s.

METALS.

Iron—Cleveland Pig	...	per ton	34s. 7 1/2d.	to 34s. 9 1/2d.
"	"	Hematite	41s. 7d.	to 41s. 10d.
"	"	Scotch Bar	...	per ton £5 5s.
"	"	Best	...	£5 12s. 6d.
"	"	Extra Best	...	£6 7s. 6d.
Yellow Metal Sheets	...	per lb.	4 1/2d.	to 4 3/4d.
Copper—British, Best Selected	per ton	£43 10s.	to £44	
Sheets, Strong	...	per ton	£50	
Australian Fine	per ton	£43	to £44	
Lead—Sheet	...	per ton	£10 1s. 3d.	to £10 2s. 6d.
"	"	Sheet, English	...	£11 to £11 5s.
Tin—English Ingots	...	...	£68 to £68 10s.	
Australian	...	...	£64 15s.	to £65 5s.
Straits	per ton	£64 2s. 6d.	to £64 12s. 6d.	
Banca	per ton	£65	to £65 15s.	
Zinc—Sheet	...	per ton	£18 5s.	

It is proposed to build a new Church of England Church in place of Christ Church, North Brixton.

THE once-famous Shelley's Theatre in Tite Street, Chelsea, is about to be demolished, and the freehold site to be brought under the hammer at the Auction Mart, early in May.

DR. ORSI has discovered, after long excavations, in the island of Pantelleria, a prehistoric village of the Stone Age. Of special importance are the fortifications, consisting of a colossal wall, or agger, made of stones roughly heaped together. He has also found some strange buildings, which he believes to be dome-shaped pre-historic tombs, belonging to the necropolis of the primitive inhabitants of Mursia.

£20,000 is needed for the extension of the handsome building of the Jew's Hospital and Orphan Asylum, of which at West Norwood, Mr. Alderman Faudel Phillips is the President, so as to accommodate 100 more orphans. In 1876, when the Jew's Hospital was amalgamated with the Jew's Orphan Asylum, there were only 155 children in the two institutions. In 1895, the number is 277, which far exceeds the maximum the present building can accommodate.

The Builders' Journal COMPETITIONS.

No. 2.—A Village Club House.

The Proprietors of the BUILDERS' JOURNAL invite drawings, in competition, from those under twenty-six years of age, for a Village Club House, on a corner site, 150 feet by 40 feet. The Club to contain a general room with a dais for the villagers, a reading room and library, a bowling alley, service bar, tea room, committee room, housekeeper's apartments, and three cubicles for public use. The necessary outbuildings must be provided. Cost not to exceed £2,000. Drawings to be delivered at Talbot House, Arundel Street, Strand, not later than Monday, the 6th May, 1895.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—**A Gold Medal and a Cheque for £10 10s.**, to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—**A Silver Medal and a Cheque for £3 3s.**, to the competitor who submits the best single set of drawings during the session.
- 3.—**Certificates** signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

ON Saturday the last bolt was driven into the gigantic wheel at Earl's Court by Mrs. Basset. The lady ascended to the top of the huge structure in a chair hauled up by a steam winch, and we believe this is the first occasion on which a lady has given the finishing touch to a work of this kind. Mrs. Basset is the daughter of Admiral Dowell, the Chairman of the Great Wheel Company, who gave such bluff and effective evidence in the libel action in which he was recently successful.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

SUICIDAL STRIKES.

To the Editor of "THE BUILDER'S JOURNAL."

DEAR MR. EDITOR,—I have noticed with interest your remarks *re* the threatened strike in the Building Trade, and it being, from the multiplicity and magnitude of the interests involved, a matter of public importance, it may interest some of your readers to know how the position strikes an outsider, one not in the trade, but in constant touch with all branches.

From a general point of view, the "greatest benefit to the greatest number" is a good object, but, as every practical man knows, there is little enough work just now, and to attempt to attain this object by trying to stop the works or any orders in hand, at the present time is simply suicidal, and one wonders at intelligent tradesmen being apparently led into such a policy, a policy which will inevitably recoil with bitter effect on themselves and their families.

I put this to a leading man in a most important branch, one whom I know is doing excellently well, and in a comfortable position. Put briefly, he admitted he was very well satisfied, also the men working under his lead. "Then why do you strike?" After some pressing, the astonishing answer came, "they could not help themselves, their votes being swamped by the labourers' vote, and he was sorry they had joined the Federation."

Comment is needless.

Another case on different lines.

A frugal steady man, now elderly, had saved enough to start as a builder. He had always been an ardent Unionist, and during the Carpenters' Strike he contributed liberally to their fund (between £40 and £50), but on commencing operations on his own account, he was so continually harassed and put to expense by the rules of the different Unions rigidly applied to his own buildings, that he bitterly repents his well-meant but ill spent contributions, and he is now a firm believer in free labour.

Further, I am assured on good authority, that in cases where free labour and piece-work have replaced the other system, satisfaction has ensued all round, both to employed and employers, the same wages being paid.

Every one knows that the Unions have done good work in the past, and no doubt will do so again in the future, but not by the dog in the manger policy of refusing to work themselves and endeavouring to coerce free men, every whit equal to themselves, and fully entitled to earn their own living on their own terms. Why trained and intelligent artisans, many of whom have spent a lifetime in learning their business, should allow themselves and their Unions to be dominated by the unskilled labour vote (said to be 13,000 strong) passes comprehension. It especially behoves the middle-aged and elderly Unionists to think twice before precipitating a strike.

The above are points which strike—Yours faithfully,

NORI.

ON Saturday last the new Municipal Buildings at Bexhill, were opened by Sir Joseph Renals, the Lord Mayor of London.

THE complete failure of the recent exploration of "Boadicea's Tomb" has not discouraged the promoters of a scheme to explore the Hill of Tara; but as the British Archaeological Society has undertaken the task, it may be taken for granted nothing will be done to spoil the hill as a place of pilgrimage. To most persons it is only known in connection with Moore's charming verses; but apart from that it has much historical importance, and contains many earthworks. Tara is only a score of miles from Dublin, and is one of the green hills seen on entering the charming bay into which the grimy Liffey finds its way.

LORD OVERTOUN has presented a site valued at £16,000 to the Glasgow Young Men's Christian Association for the purpose of founding a club and boarding house.

A NEW Baptist Chapel is to be built in Bowesfield Lane, Stockton, at a cost of £2,500. Towards the building fund the Baptist Union Extension Committee has offered a grant of £500, on condition that £1,200 is raised by the end of June.

OUT of the tenders received for the construction of the open-air baths in Burlington Street, Liverpool, the Baths Committee has decided to accept that of Messrs. Marr and Sons, for £700, subject to their complying with certain formalities in connection with the contract.

THE carpenters' and joiners' strike at Leicester entered on its fifth week on Friday last. The efforts at settlement have failed over the question of piecework, to which the men decline to agree. All the plumbers are under notice to be locked out to-morrow, and there is no sign of any settlement being arrived at. The other branches of the building trade will be seriously interfered with.

A NEW Church has been erected near Sealand Road, Chester. The new edifice, which has a very handsome appearance, will be known as St. Oswald's Mission Church of the Good Shepherd. It has been designed to suit the double purpose of a Mission Church and an Infants' School. The Nave will seat about 200 persons. The Baptistry, which is situated at the west end of the Nave, contains a handsome Font. The Chancel is lined with buff bricks and has a panelled dado, and is separated from the Nave by a Screen. The style adopted is the Perpendicular.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BASFORD.—For two pairs of semi-detached houses on Springfield-grove Estate, New Basford, Nottingham. Mr. A. H. Goodall, Market-street, Nottingham, architect:—

Hoyes and Boyfield	£1,560	0	0
Gilbert and Gabbitass	1,585	0	0
Clarke, A. B.	1,500	0	0
Attenborough, J.	1,450	0	0
Adams, J. J.	1,436	4	0
Green, L., Hucknall Torkard, Notts	1,407	10	0
Fisher, R.	1,398	0	0
Whittaker, T.	1,398	0	0
Bell, A. G.	1,392	0	0
Andrew, H.	1,363	0	0
Gell, W., and Son	1,366	0	0
Cuthbert, B.	1,355	12	0
Keeling, B.	1,350	0	0
Cooper, J.	1,350	0	0
Wheatley, J.	1,340	0	0
Caulton, G.	1,322	0	0
Lovett, G. T.	1,307	7	6
Pinkett, W.	1,300	0	0
Evans, F.	1,295	0	0
Oscroft, J.	1,292	0	0
Scott, H., and Son	1,290	0	0
Wartnaby, F.	1,283	0	0
Appleby and Lambert	1,282	0	0
Pillatt, G. A.	1,270	0	0
Maule, W.*	1,267	0	0

(Rest of Nottingham.)

* Accepted for one pair only.

BATH.—For building the Pump Room extension, for the City Council:—

Downs, London	£26,190	0	0
Higgs and Hill, London	25,580	0	0
Grover and Son, London	24,930	0	0
Perry and Co., London	24,507	0	0
Estcourt and Son, Gloucester	23,627	0	0
Forse, Bristol	23,085	0	0
Cowlin, W., and Sons, Bristol	21,787	0	0
Beaven, A. J., Bristol	21,510	0	0
Holloway Brothers, London	18,454	0	0
Hayward and Wooster, Bath	18,255	5	0
Long, J., and Sons, Bath (accepted)	18,138	0	0

COLLIERS WOOD.—For sanitary and decorative work to four houses in Robinson-road, Messrs. Treleven and Payne, 18, Acre-lane, Brixton, S.W., and 8, John-street, Adelphi, W.C., surveyors:—

Knight and Son (accepted).

(Lowest of three tenders received.)

CROYDON.—For erecting a detached house, Selsdon-road, Mr. A. Broad, architect, 3, High-street, Croydon. Quantities by the architect:—

Bryan and Son	£752	0	0
Hanscomb and Smith	689	0	0
Marriage, W.	680	0	0
Smith, J., and Sons	665	0	0
Barker, D. W.	633	0	0
Bullock, A.	626	0	0
Smith, W., and Son	625	0	0
Page, S.	620	0	0
Saunders, E. J.	600	0	0
Bulld, E. P., and Co. (accepted)	593	0	0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.ASTRAGALS
OF
COPPER OR ZINC**BRICKS** 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.

Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.**A. W. ITTER**, Brick Manufacturer, Fletton House, **PETERBOROUGH**.
Brickworks and Railway Siding on Great Eastern Railway.

METAL CASEMENTS of every description. GLASS ROOFING Shelley & Co's & Hopes Patents	HENRY 55 HOPE LIONEL ST. BIRMINGHAM LONDON, 13, King St Cheapside. MAN- -CHESTER 8 Exchange Arcade.
---	---

"ECLIPSE" PATENT GLAZING.*The only Absolutely Imperishable Glazing.*Extensively used during the last fourteen years for H.M. Government, the principal Railway
Companies and Corporations, and for all kinds of Buildings in all parts.**MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.****MELLOWES & CO.** Works, **SHEFFIELD**. **LONDON**, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.**CROYDON**.—Accepted for erecting a row of five cottages,
Alma-place, Thornton Heath. Mr. A. Broad, architect, 3,
High-street, Croydon:—Smith, W., and Son £955 0 0
(No competition.)**CROYDON**.—For four semi-detached houses, Brigstock-
road, Thornton Heath. Mr. A. Broad, architect, 3, High-
street, Croydon:—Smith, W., and Son £2,000 0 0
(No competition.)**DERBY**.—For the erection of additional wards to infirmary
at Derby Union. Coulthurst and Booty, architects, 4,
Albert-street, Derby. Quantities supplied:—

Eaton, W., Derby	...	£2,156	0	0
Walker and Slater	...	2,150	0	0
Chattell, H.	...	2,136	0	0
Weston, R.	...	2,069	0	0
Parker, J.	...	2,068	0	0
Ford and Co.	...	2,044	0	0
Brown, A.	...	2,000	0	0
Walkerline, W.	...	1,995	15	7
Wagg, T.	...	1,929	0	0

GUILDFORD.—For the erection of a Billiard-room at
Tangle Mere, Chilworth, for Mr. W. Hartmann. Messrs.
Treleaven and Payne, 8, John-street, Adelphi, W.C., and
18, Acre-lane, Brixton, S.W., architects.

Mitchell Bros., Salford	...	£1,075	0	0
Maxwell Bros., London	...	984	0	0
Whitehead and Co., London	...	945	0	0
Peacock Bros., London	...	938	0	0

LONDON.—For alterations and shop-fittings at No. 25,
Westbourne-grove, W., for the United Kingdom Tea Co.,
Ltd. Mr. A. G. Hennell, architect:—

Marks	...	£1,011	13	5
Holloway Bros.	...	970	0	0
Burman and Son	...	940	0	0
Johnson and Co.	...	940	0	0
Black and S. n...	...	863	0	0
Sumner, W., and Co., Ltd. (accepted)	...	848	0	0

LONDON, N.W..—For alterations to the Sir Robert Peel
public-house, Malden-road, Kentish Town, for Mr. A. W.
Ritchie. Mr. Albert E. Pridmore, M.S.A., F.S.I., 2, Broad-
street-buildings, E.C., architect:—

Pearce, E.	...	£285	0	0
Antill and Co.	...	245	0	0
Wiltshire, W. J.	...	230	0	0
Lamble, S. R.	...	219	0	0
Marchant and Hirst	...	179	0	0
London and Co.	...	169	0	0
Hayworth Bros.	...	168	0	0

LONDON.—For the erection of mission-house, &c., at
Church-street, Shoreditch, for the Church Extension Asso-
ciation (Incorporated). Mr. Richard J. Lovell, architect, 46,
Queen Victoria-street, E.C. Quantities by Mr. James
Kennedy, 31, Great James-street, W.C.:—

Roffey	...	£4,972	0	1
Dearing and Son	...	4,607	0	0
Simpson and Son	...	4,521	0	0
Clarke and Bracey	...	4,435	0	0
Colls and Sons	...	4,238	0	0
Roberts, L. H. and R.	...	4,129	0	0
Patman and Fotheringham	...	3,896	0	0
Ivory (accepted)	...	3,878	0	0

LONDON.—For alterations, additions, and decorative work
to the Crown and Sceptre, 2, Streatham-hill, London, S.W.,
for Mr. A. E. Austin. Messrs. Treleaven and Payne, 18,
Acre-lane, Brixton, S.W., and 8, John-street, Adelphi, W.C.,
architects and surveyors:—

Candler and Son	...	£563	0	0
Peacock Bros.	...	510	0	0
Maxwell Bros.	...	504	0	0
Phelps, A.	...	482	0	0
Hopkins, F. H.	...	469	0	0
Read, W.	...	465	0	0
Mould and Son	...	456	0	0
Whitehead and Co., Clapham *	...	453	0	0

* Accepted.

GARTER & CO.
TILES MOSAIC
FAIENCE
Poole Dorset**LONDON**.—For the erection of a warehouse, Great Saffron-
hill, for Messrs. G. W. Munt and Sons. Mr. Wimble,
architect:—

Hall, Beddall and Co.	...	£2,600	0	0
Ashby and Horner	...	2,570	0	0
Colls and Sons	...	2,563	0	0
Scrivener and Co.	...	2,537	0	0
Jones, E.	...	2,455	0	0
Lawrance, E., and Sons	...	2,452	0	0
Killby and Gayford	...	2,440	0	0

LONDON.—For the erection of stabling and coachhouse
(section A.), at Dalberg-road, Brixton, S.W., for Mr.
A. Sholl. Messrs. Treleaven and Payne, 18, Acre-lane,
Brixton, and 8, John-street, Adelphi, W.C., architects and
surveyors:—

Jones	...	£464	0	0
Smart	...	436	10	0
Hammond	...	347	10	0
Maxwell Bros., Brixton (accepted)	...	345	0	0

PETERBOROUGH.—For the erection of four dwelling-houses,
Dagthorpe-road, for Mr. Christian. Mr. J. G. Stallebrass,
architect, North-street, Peterborough. Quantities by the
architect:—

Bailey	...	£798	0	0
Watson and Spriggs	...	780	0	0
Rowe	...	773	0	0
Jellings	...	762	2	4
Pape	...	760	0	0
Bridgefoot	...	755	0	0
Binder	...	748	0	0
Sibley	...	725	0	0
Cracknell	...	708	0	0
Gutteridge (accepted)	...	680	0	0

(All of Peterborough.)

PLYMOUTH.—For erection of warehouse, Nos. 29 and 30,
Kintbury-street, Plymouth, for Messrs. W. N. Hodge and
Son. Mr. James Harvey, M.S.A., 9, Courtenay-street,
Plymouth, architect. Quantities by the architect:—

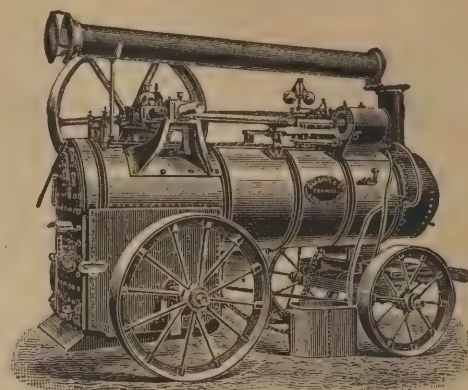
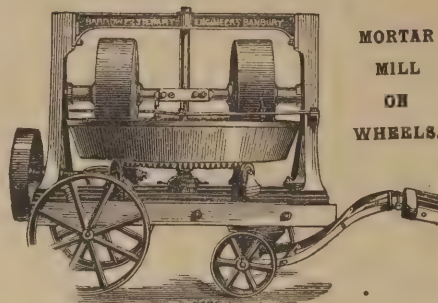
Roach and Lovell	...	£1,500	0	0
Blackell and Shepherd	...	1,499	0	0
Palmer	...	1,365	0	0
Blowey	...	1,350	0	0
Trevena	...	1,319	0	0
Good and Co.	...	1,297	0	0
May	...	1,295	0	0
Goat	...	1,250	0	0
Jenkin and Son	...	1,235	0	0
Wakeham Bros.	...	1,185	0	0
Blake	...	1,139	0	0
Kearn and Sons	...	1,080	0	0
Coles*	...	1,070	0	0

* Accepted, with slight modification.

WEST CROYDON.—For making new roads, laying sewers,
&c. Messrs. E. E. Croucher and Co., 27, Chancery-lane,
W.C., surveyors:—

Kavanagh, S., Surbiton Hill	...	£1,217	15	8
Langridge, W., Croydon	...	1,185	0	0
Iles, E., Mitcham Common	...	1,173	0	0
Sreeter Bros., East Croydon*	...	1,044	7	0

* Accepted.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

RODBOROUGH.—For building Rodborough Church, Rodborough, near Stroud. Messrs. F. S. Waller and F. W. Waller, architects, Gloucester:—

Jones, D. C., and Co ...	£3,310	0	0
Beavis, Henry R. ...	3,057	0	0
Dolman and Ponting ...	3,049	0	0
Freeman, Jesse ...	3,007	0	0
Jones, W. ...	2,786	0	0
Cowlin, W., and Sons ...	2,688	0	0
Hatherley and Carr ...	2,662	0	0
Cox, Stephen ...	2,487	0	0
King and Sons ...	2,338	0	0
Cook, A. S. (accepted in part) ...	2,253	1	8
Beavis, E. ...	2,239	1	9

WIMBLEDON.—For the erection of two houses in Wycliffe-road, for Mr. Ward. Messrs. Treleaven and Payne, 18, Acre-lane, Brixton, S.W., and 8, John-street, Adelphi, W.C., architects and surveyors:—

Brooks, W. ...	£790	0	0
----------------	------	---	---

WOLVERHAMPTON.—For building "malting and premises" at Wolverhampton, for the Wolverhampton and Dudley Breweries, Limited. Mr. J. D. Wood, architect, Birmingham:—

Lovatt, Henry ...	£6,384	0	0
Hughes, Merton ...	5,971	0	0
Gowing and Ingram ...	5,900	0	0
Dallow, John ...	5,850	0	0
Giles, E. ...	5,800	0	0
Harley and Son ...	5,787	0	0
Tildesley, Thomas ...	5,625	0	0
Hodges, G. ...	5,600	0	0
Guest and Son ...	5,550	0	0
Horton, C. A. ...	5,453	0	0
Lynex, Alfred ...	5,450	0	0
Lowe and Sons ...	5,395	0	0
Willcock and Co., Wolverhampton* ...	5,315	0	0

* Accepted.

YORK.—For lighting the city by electricity, for the Corporation:—

Electric Construction Co., Wolverhampton ...	£10,865	0	0
--	---------	---	---

Recommended for acceptance.

CONTRACTS OPEN.

TO PAINTERS, PLUMBERS, AND OTHERS.

The Commissioners of Sewers of the City of London will meet in the Guildhall of the said City, on TUESDAY, the 7th of MAY, 1895, at HALF-PAST ONE o'clock precisely, to receive TENDERS for the PERFORMANCE of such PAINTERS' AND PLUMBERS' WORK as may be required by the Commissioners, for a period of three years from Midsummer-day next, upon the terms contained in a specification, which may be seen and copied at this office.

Forms of Tender may also be had.

Security will be required for the due performance of the contract.

Tenders must be endorsed on the outside "Tender for Painters' and Plumbers' Work," and be delivered at this Office before ONE o'clock on the said day of treaty, and persons tendering must attend personally, or by a duly authorised agent, at HALF-PAST ONE o'clock precisely on that day.

The Commissioners do not pledge themselves to accept the lowest or any Tender.

H. MONTAGUE BATES,
Principal Clerk,
Guildhall, E.C.
April 8th, 1895.
Commissioners of Sewers.

CONTRACTS for SUPPLY of BUILDING MATERIALS to DARTMOOR, PARKHURST, and PORTLAND CONVICT PRISONS.

Persons desirous of TENDERING for the SUPPLY of TIMBER, DEALS, BRICKS, LIME, CEMENT, SAND, SLAB and ROOFING SLATES, &c., for New Buildings for the period ending MARCH 31st, 1898, are requested to send their Tenders, prepaid, to the Directors of Convict Prisons, Home Office, Whitehall, S.W., on or before SATURDAY, 4th MAY, 1895, at noon.

Forms of Tender can be had on application to this Office.

Prison Department, Home Office, S.W.,
April, 1895.

LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W

SMOKEY CHIMNEYS & DEFECTIVE
VENTILATION.

THE
"DULCE DOMUM"
CHIMNEY TOPS & VENTILATORS
(Downes' Patent).



Chimney Top.

The only Chimney Top which can be Easily Swept with the Ordinary Apparatus without being damaged. A Positive Preventative of Down-Draught, so Constructed that it Creates a Continuous and Powerful Up-Draught. Simple in Construction having No Movable Parts, Nothing to Oil or Repair. Cannot Get Out of Order. Strongly Made in Galvanised Iron. Once Fixed will Last for Years. Applicable also for Ventilating Public Buildings, &c.

Testimonials can be seen and prices obtained at the Patentee's Offices—

11, THE PARADE, Lewisham High Rd.,
New Cross, LONDON, S.E.



Soil Pipe Ventilator

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.
SLATE MERCHANT,
SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

Penrhyn-Bangor,
Oakeley-Palmerston,

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

TO ENGINEERS.

CONTRACT No. 2.

The Guardians of Mile End Old-Town are willing to receive TENDERS for the ERECTION of NEW LAUNDRY MACHINERY, NEW ENGINES, STEAM PLANT and general ENGINEER'S WORK in connection with their new Steam Laundry, and ALTERATIONS and ADDITIONS to the Laundry and Boiler House, at the Workhouse, all situate in Bancroft road, London, E.

The plans can be inspected, and copies of the specifications obtained, of the architect, Mr. CHARLES F. BURDEN, at his Office on the premises, on and after THURSDAY, MAY 9th, 1895, between the hours of TEN a.m. and FOUR p.m., on the production of the receipt of a deposit of a £10 Bank of England Note, made with the undersigned, which deposit will be returned to parties sending in a bona-fide Tender, at the time and in the manner specified, accompanied with such specifications.

Sealed Tenders, endorsed on the outside "Tenders for Laundries," properly filled up and attested, must be delivered at my office not later than FIVE o'clock on the evening of the 23rd day of MAY, 1895.

Persons tendering will be required to observe such hours of labour, and pay such rate of wages, as are generally considered fair with the several trades engaged, and to enter into a bond with approved sureties for the due performance of the contract.

The Guardians do not bind themselves to accept the lowest or any Tender.

WILLIAM THACKER,
Clerk to the Guardians.

Guardians' Offices,
Bancroft road, London, E.
April 24th, 1895.

TO CARPENTERS AND OTHERS.

The Commissioners of Sewers of the City of London, will meet in the Guildhall of the said City, on TUESDAY, the 7th of MAY, 1895, at HALF-PAST ONE o'clock precisely, to receive tenders for the PERFORMANCE of such CARPENTER'S WORK as may be required by the Commissioners, for a period of three years from Midsummer-day next, upon the terms contained in a specification, which may be seen and copied at this Office.

Forms of Tender may also be had.

Security will be required for the due performance of the contract.

Tenders must be endorsed on the outside "Tender for Carpenters' Work," and be delivered at this Office before ONE o'clock on the said day of treaty, and persons tendering must attend personally, or by a duly authorised agent, at HALF-PAST ONE o'clock precisely on that day.

The Commissioners do not pledge themselves to accept the lowest or any Tender.

H. MONTAGUE BATES,
Principal Clerk,
Guildhall, E.C.
April 8th, 1895.
Commissioners of Sewers.

TO BUILDERS.

The Town Council of Gravesend invite TENDERS for the ERECTION of MUNICIPAL OFFICES in the rear of the Town Hall, in accordance with drawings and specifications prepared by Mr. A. G. SMITH, M.S.A. Architect, at whose Offices (No. 1, Darnley street, Gravesend), they can be inspected on and after MONDAY, APRIL 30th, during business hours.

Bills of quantities can be obtained of the Architect by any applicant on payment of a fee of Two Guineas, returnable on receipt of a bona-fide Tender from the applicant, but the employer does not warrant their accuracy.

Tenders in sealed envelopes, endorsed "Tenders for Offices," must be delivered at my Office in the Court House on or before MAY 14th.

The Contractor must be prepared to execute the contract, and be bound by the general conditions which can be inspected as aforesaid, and to give security in the sum of £250.

The Council do not bind themselves to accept the lowest or any Tender.

CHAS. E. HATTEN,
Town Clerk.

SPHINCTER WORKS,
EMERSON STREET, LONDON, S.E.,

MANUFACTURERS OF

LECLANCHE BATTERIES, TELEPHONES,
ELECTRICAL THERMOGRAPHS,
WATER TELEGRAPHS, and COMPLEX
COMMUNICATIONS of all kinds

The Builders' Journal.

Vol. I., No. 13.

Tues., May 7, 1895.

ILLUSTRATIONS.

Staircase in the University, formerly Durham Castle: Sketched by C. E. Mallows 193	Portrait of Mr. Charles H. Heathcote 200
The Cloisters, S. Trophime, Arles, Bouches du Rhone: by C. E. Mallows 195	Mr. Heathcote's Own House at Buxton..... 200
A Modern House: By Paul Ogden, Architect 196	A View of King Street, Manchester: Showing Works by Charles Heathcote 201
Tower of the New "Old South Church," New Boston, U.S.A. 197	Portrait of Mr. Paul Ogden 202
An Old Dutch House in South Africa: Restored for Mr. Cecil Rhodes 198	A House by Ditto 202
The Club House, Newberry Street, New Boston, U.S.A. 199	A Lodge by Ditto 202
	The Manchester Trust Building in King Street: By Charles Heathcote 203
	Plans of the Silk School for Leek 204

CONTENTS.

Burlington House 193	Men who Build, No. 12— Mr. Charles H. Heathcote 200	Buttresses 205
Drawing with Hot Air 194	A Chat with Mr. Paul Ogden 203	Art Appreciation in Sheffield 205
Of Interest to Metal Workers 194	Do Low Fireplaces give more Heat? 203	Mechanics and the Stability of Structures 205
A "Find" in Frescoes 194	The Church of Lord Beaconsfield 203	Architecture in Italian Painting 205
Science at the Royal Society's Soiree 194	Sewage Disposal in Havre 203	The Building Trades Exhibits at the Health Exhibition, Manchester 207
In the Architectural Room at this Year's Academy 194	A Silk and Technical School for Leek 204	The Builders' Journal Competitions 208
Bricks and Mortar 195	Moorish Stucco 204	Trade and Commerce 208

The Builders' Journal.

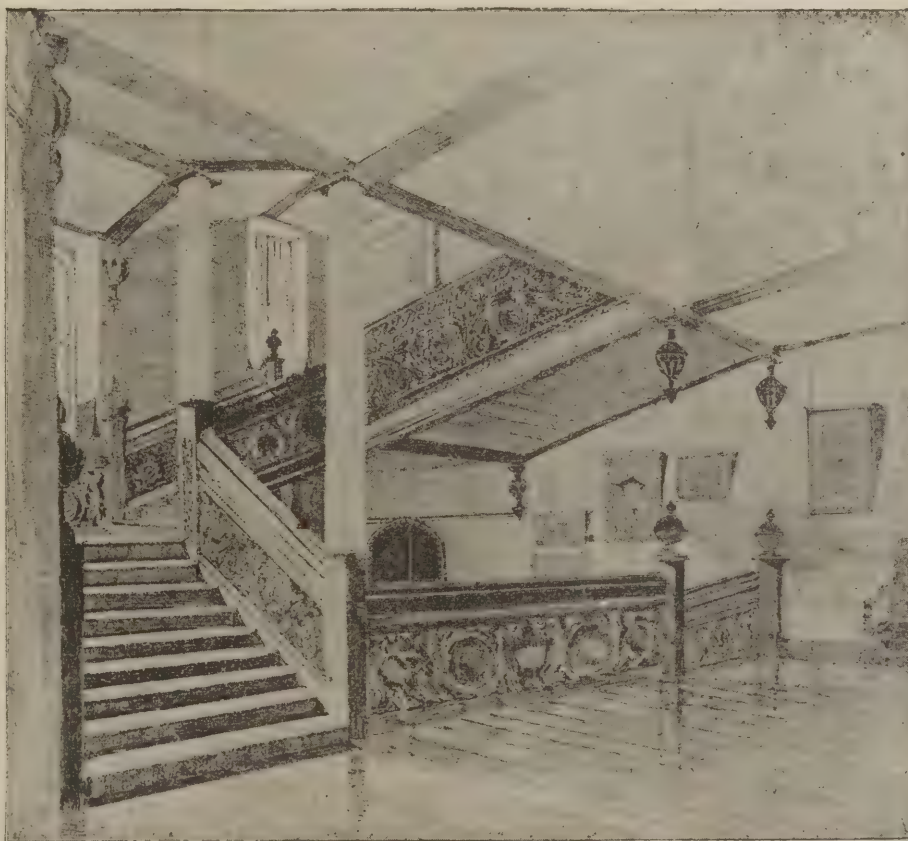
Burlington House.

It is the fashion to temporise with the Academy; to make the best of a barren time; to describe it as neither better nor worse than its predecessors. We are no convert to such compromise. We have dealt with the Architectural Room in a separate article; as for the Academy proper, it is either better or worse than its predecessors, for Art cannot stand still; it must be either vigorous and vital or imitative and commonplace. Each year's Academy sees the identical preliminary paragraphs of anticipation—machine-made; the foreshadowing of this and that by this or that artist; the little fashionable flutter and *frou-frou* of gowns; the columns of heavily-padded morning contemporary criticism, and the dissatisfaction or disgust of the few who know a good picture from a bad one on the walls of Burlington House. Now there is cant in criticism as well as humbug in mere praise, and we are not sure that every New Critic is right and all the Old Critics wrong. There are too many geese cackling of Art and Literature nowadays, fancying themselves swans. No sudden crop of songsters ever disturbs our wood, and the remark is a parable. So that we have come to distrust the New Criticism almost as much as the Old, and we should distrust it, so far as Art goes, altogether were it not for the Picture Shows that lend, each year, such criminal corroboration. There can be no attempt at eulogy on behalf of this year's Academy; the plain facts may be stated: the walls are crowded by conventionalisms; by the duly measured and inordinately dull canvases we have every experience but no

right to expect; and it is only here and there, casis amid desert, or more of mirage than oasis (so high and ill are the few good things hung), that one comes upon a picture worthy the name and palette of the artist, or calculated to give an unknown man both name and fame. Polish and philandering have done their worst, surely, with English Art, and the time has come when the new and bolder men must be promoted to the

startles us to wonder if the years (and all those portraits) have been a dream. Here is he, painting in that pre-Raphaelite manner of his, painting in the manner of "St. Agnes' Eve," though, alack, not near so well; painting at the end of a career in the manner and method of the beginning—it is astonishing! How are we to regard the intermediate stage? as lapse or lucidity? The Rossetti Faith will have it lapse. Mr.

Tadema is disappointing with his overcrowded and small canvas containing all the virtues of marble and the like, and the old sameness of theme; we look in vain for an Orchardson worthy of the name; no hint of his barbed social sarcasms in this tentative little picture of a rose and chrysanthemums! Mr. Watts puzzles us rather than mystifies, and Mr. Luke Fildes would appear to have gone over to The Majority—portrait painters, spelling success. We find a "Forbes" with all the old clever trick of firelight; this time in a smithy with an old grey horse catching up the gleam. There is all Mr. Forbes' strength in this picture. For the rest, Mr. Frank Dicksee has given us an unimpassioned "Paolo and Francesca"—Rossetti's man and woman of rarer race, warmer temperament, grander blood. And it is only when we come to the always brave and often brilliant Sargent, truth and humour and



STAIRCASE IN THE UNIVERSITY, FORMERLY DURHAM CASTLE: SKETCHED BY C. E. MALLOW.

honoured and earlier rooms of Burlington House. Yards of tradition, of the Expected, weary one, till it is too late to come with any sense of freshness upon the more sympathetic work of the younger men. The illness of the President, extending over some months, is undoubtedly responsible for much sense of loss in the pictures he sends this year. One misses the usually gracious lines and the calm Classic sense of repose in his "Flaming June." Sir John Millais

comedy in every line, cruelty when need be in his portraiture; or to Frank Bramley's reposeful, exquisite "Sleep;" or to Shannon's delightful colouring, smoother, less sensational than Sargent's; or to Mr. Tuke's greyer things, or to one of the figure pictures that Mr. Frank Brangwyn loves to paint—that we begin to think Burlington House is, after all, a place in which to see pictures. The last picture we shall name is Mr. Waterhouse's "St. Cecilia,"

Here is the spirit of romance, of mediævalism, of chivalry; here the temperament that scorns the snap-shot sensation, the inanity, the superficial interest of much modern Art. But the British public will have itself pictorialized and illustrated, and while that demand is still supplied we suppose Burlington House will always have an affinity to Burlington Arcade.

Drawing with Hot Air. An architect is responsible, we are glad to say, for one of the few new things under the sun. He has invented an extraordinary process by means of which decorative designs may be drawn without once touching the wood upon which the picture is produced. The thing is certain to prove an artistic sensation and may possibly—if all said about it be true—revolutionize wood panel work. Mr. Smart is an Australian, and while in practice as an architect he went in largely for decorative designing. This led him to invention, and now we have the fruition of his labours—a red hot pencil capable of producing charming effects without once touching the picture. Poker work was a parody, in many ways, of the picturesque, and the old German art of wood burning was only productive of line, bold and *bizarre*, but lacking, of course, in *chiaroscuro*. The new process of drawing with hot air, which Mr. Smart calls Pyro-tint—by the way the inventor was the first Victorian to pass the examination for the Associateship of the Royal Institution of British Architects—gives an effect greatly resembling mezzotint, and is capable of producing “wash” as well as line. Light and shade are simply obtained by increasing or decreasing the distance—the nearer the pyro-tinter to the wood the darker the shade; the further away the more luminous the light. The instrument is a hollow platinum stylus, connected to a hand pump that forces air through benzoline. The air is carried through an India-rubber tube to a reservoir in the point. A match being applied, the metal immediately becomes red hot. This process, applied to furniture, may give machine wood-carving the go-by as a means of cheap yet effective decoration.

Of Interest to Metalworkers. THE Exhibition which the Cambridge Antiquarian Society intends to hold, of antique and rare specimens of plate, for which the Colleges are famous, is likely to prove highly interesting. It is well-known that the collections of the 'Varsity and the Colleges are of great value and antiquity; some of the pieces are in themselves beautiful, while all are historically important. No opportunity has, however, occurred as yet of assembling the different pieces together, and comparing one with another. Thanks to the cordial co-operation of the various owners, such an Exhibition opens to-morrow in the Fitzwilliam Museum. About two hundred articles will be exhibited. They will include the maces belonging to the town and the University; several articles, once the property of the Corporation, but sold in 1837; the most important cups, tankards, salvers, and candlesticks from the different Colleges; and certain pieces of Church plate from the county and the town. Among the latter are the thurible and the incense-boat found in Whittlesea Mere, and believed to have been once the property of Ramsey Abbey.

THE new Church of St. Aidan, Walton-le Dale, near Preston, is fast approaching completion, and is expected to be ready for opening in July next. Only a portion of the Architect's plans have been carried out at present, the erection of the entire Church being deferred until additional funds can be obtained. The foundation stone of the structure was laid by the Bishop of Manchester during last year.

A “FIND” IN FRESCOES.

IT is just possible that nothing but whitewash, or, at most, a coat of plaster, hides a long-lost series of Frescoes known to have been painted by Albert Durer for the Duke of Saxe-Wittenberg at the beginning of the sixteenth century, and German Art circles are greatly excited. Not long ago Professor Gurlitt, a Saxon archaeologist, in the course of his examination of the old account-books of the Castle of Wittenberg, came upon several documents which made it evident that Durer had undertaken the pictorial decoration of the College Chapel and of the walls of two of the halls. He has, moreover, discovered ample documentary proof in the archives of Dresden, Magdeburg, and other cities that the Frescoes were in existence at a comparatively recent period. Then came the question, What has become of them? The answer was, unfortunately, only too simple as regards those which had been placed in the Chapel, as the Vaulting which Albert Durer decorated had long ago crumbled away; but in the opinion of Professor Gurlitt, Wittenberg, like many Palaces and Churches in different parts of Europe, had been the scene of that once common form of Vandalism which concealed or destroyed so many mural decorations by thick coats of plaster. The German Emperor has been so much impressed by the suggestions of Professor Gurlitt that he has given orders for a thorough inquiry, and the World will soon know whether these mural pictures of the greatest painter of his time will be once more exposed to view. The incident has led to a revival of interest in the question of removing the plaster which conceals a series of Frescoes on the walls of one of the rooms in the old Palace of the Popes at Avignon. This fine old mediæval Castle, like that of Wittenberg, is now used as a barracks, but it is well known that it once contained fine mural works by famous artists of the French and Siennese Schools of the fourteenth century; and there are many inhabitants of the city who remember a crucifixion on a wall on which nothing but whitewash is now visible. A writer in the *Journal des Débats* suggests that the French Government should follow the example of the Emperor William and take immediate steps to ascertain whether the old Frescoes at Avignon can be recovered.

SCIENCE AT THE ROYAL SOCIETY'S SOIREE.

THE Fellows and guests who attended the Soirée of the Royal Society on Wednesday evening, at Burlington House, were provided with a notable intellectual treat. The exhibits were even more diversified than usual. Professor Roberts Austen had an electrical furnace, supplied with current from the street main of 70 ampères and 100 volts, which was engaged in melting chromium, an intractable metal that has only in the past few weeks given way to this process. Messrs. Johnson and Matthey showed a series of metals of the platinum group of the value of over £10,000, obtained from gold, and silver, and platinum, of an estimated value of two or more millions. The spectra of the new atmospheric element, argon, was shown by Professor Ramsey. Mr. Shaw's demonstrations of the formation of clouds were very pretty, and Professor Ayrton had a simple, ingenious, and effective student's apparatus for determining the mechanical equivalent of heat. Professor Ewing's magnetic tester for sheet iron for electrical transformers and dynamo-armatures was also a natty little instrument. In Major Holden's optical electric meters the readings of the dials can be magnified to any extent, as in the Thomson galvanometer, with the advantage that all the working parts of the instruments may be of the smallest dimensions, and be worked by the least consumption of energy. The display of the Plymouth Marine Biological Station was more than usually interesting, particularly in regard to the successful use of formic aldehyde in dilute solutions for the preservation of transparent organisms as museum specimens. The combustion of acetylene for illuminating purposes was demonstrated by Professor V. B. Lewes, and Major Cardew sent instructive examples of the incrustations on the insulators of the electric light mains, to which the explosion in St. Pancras has been attributed.

IN THE ARCHITECTURAL ROOM AT THIS YEAR'S ACADEMY.

[By OUR SPECIAL REPRESENTATIVE.]

IT is chiefly as a trysting-place or as a haven of rest to elderly folk wearied with the trials of picture-seeing that the Architectural Room at the Royal Academy is known to the general public. As a rule, even artists who do not happen to be architects find but little of interest within its walls. For this, we think, the architects mainly have themselves to blame; they seem, for the most part, to delight in the matter-of-fact elevation, perfectly unintelligible to the average man, or in an unattractive and inartistic rendering of their work in line perspectives of the ancient and hard order. This year, however, there is light on the horizon, and thanks chiefly to Mr. Henry Wilson and Mr. Prior there is a likelihood of even some of the more cultured of the general public, and certainly of all artists, being attracted to the room. At first sight, indeed, Mr. Henry Wilson's contributions seem to have strayed from the adjoining gallery by mistake, so strong, vigorous and beautiful in colour and design are they. These two notes of colour give one a suggestion of what an ideal Architectural Room could be were architects to commission painters or men specially trained to illustrate their works. Imagine, for example, how attractive the Architecture would be with say a dozen of Mr. Joseph Pennell's pictures in it; Architecture rendered with all his wonderful power of suggesting light and shade, of form and of colour. How some of Bodley's Churches and Norman Shaw's houses would glisten in his hands and sparkle at the touch of his pen. Or, again, some of the excellent domestic work of Mr. E. J. May, Gerald Horsley, and many others, interpreted by water-colour drawings by Alfred Parsons or Abbey. Will ever Architects be found bold enough to try the experiment? Then, and not until then, will the Architectural Room be on the same footing with the rest of the Galleries; at present it is considered a dreary waste to be carefully avoided by the average visitor.

It is most fortunate that in Mr. Wilson our Art possesses a man who, if he had not chosen Architecture as a calling, would have made a brilliant reputation as a painter, and indeed, studying his pictures this year one has almost the regret, were it not for his previous contributions to Architecture, that Painting or Sculpture does not claim him entirely. These are great drawings—Nos. 1,507 and 1519—the first, a “Study for the West Front of Saint Andrew, Boscombe,” and the other, the Interior of the Chancel of the same Church. Broad and luminous, and powerfully handled, they are artistic treats considered as water-colour drawings only. Considered as Architecture, they may be open to the criticism of being unreal phantasies or dreams impossible of realization; we can only say we hope to see many more such dreams from the same hand, and what is more, live to see these dreams come true. Returning to consider the exterior view, there is an immense amount of blank wall space in the upper part of the design, which gives great value to the deeply recessed centre arch with the elaborately traceried window, and the sculptured crucifix and figures over it. Over the centre of this arch is a figure of Christ, with decoration suggested on either side. The upper part of the Front is somewhat elaborately designed with a small square spire, and a flatly treated kind of table upon it. The whole design is one of great originality and power, with a sturdy independence of style, showing a strongly marked preference for Byzantine and Egyptian work.

Mr. Wilson has contrived to get in the interior view, looking towards the Chancel, a wonderful effect of mystery and gloom, the interests of the picture being focussed in the traceried east window. The rest of the Architecture is only dimly suggested, but it is that kind of suggestion which tells all that is necessary of the lofty Byzantine-like columns, of the finely treated organ and the sculptured decoration, and leaves the impression of a beautiful dream of what we can say, without affectation, is a poem in stone.

The exhibit next in interest, and which, doubtless, will be most attractive to the lay mind, is Mr.

Prior's model (made, it is hinted, by his own hands) of a small country house. Designed with great simplicity and restraint, it has a character quite its own, and is admirably adapted to its purpose. The plan is excellently well arranged, and is, moreover, well illustrated and explained by the small plans nailed to each corner of the board on which the model is exhibited. As we hope to illustrate this later on, further description is perhaps unnecessary. In strong contrast to this exhibit, is the model next it, No. 1,608, a hard metallic highly finished representation of Sir Arthur Blomfield's "Chapel at Tyntesfield." The model is in complete harmony with the architecture, which is in the "Correct" Decorated style. If this sort of thing extends, and architects should take to generally illustrating their works by means of models, the Architectural Room is likely to be in the future, the largest gallery

buildings of Christ's Hospital would have looked in the hands of illustrators like Robert Blum or John Fullelove!

Another design for the same subject was that submitted by Messrs. Paley, Austin and Paley, and which must have run the selected design very closely. It is, however, designed in a more "Correct" Gothic style than the others, and is admirably illustrated with pen drawings by Mr. Austin of the Entrance Front (No. 1,483), the Interior of the Dining Hall (1,468), and the Chapel (1,461).

Next, in point of size at all events, Mr. Beattie's project for the monstre Hotel in Princes Street, Edinburgh, is the most important. We must confess to a lack of appreciation of the merits of this design, which is far too fussy and over elaborated with detail, and wanting in cohesion and simplicity of design. It compares most unfavourably with

design. Again, imagine this country house of Shaw's illustrated by a water-colour by Alfred Parsons! That combination of architect and illustrator would be very near perfection. The water-colour drawing by Mr. Alfred Waterhouse, R.A., of his Prudential Assurance Company's Offices at Edinburgh, is an example of a masterly drawing, ruined by a wofully commonplace design.

Another design of prominence is that by Mr. Skipworth for "A Nineteenth Century attempt at a large Cathedral," shown in a perspective view rather neatly drawn in pencil. There are portions of this design that indicate a good deal of power of invention, notably the West Front, which, however, is spoilt by side Towers terminating in an octagonal lantern of brick and stone, and rather odd-looking leaded spires which rise from it.

Of the Churches by Messrs Paley and Austin,



THE CLOISTERS, S. TROPHIME, ARLES, BOUCHES DU RHONE: BY C. E. MALLOWS.

there. The prospect is quite encouraging. Returning to consider the more important of the drawings on the walls, Messrs. Aston Webb and Ingress Bell's large bird's-eye view of Christ's Hospital and Schools at Horsham, naturally claims first attention, and is hung in the place of honour on the South wall. The drawing, most difficult to treat from an artistic point of view, is somewhat hard in general effect, but well illustrates the admirable design which is now too well known to need any detailed description here. It is sufficient to say that it maintains the architects' deservedly high reputation. This cannot, we fear, be said of No. 1,462, Mr. Jackson's interpretation of the same subject. The architecture has scarcely received fair treatment in illustration and gives the impression of a very ordinary type of work, not at all what would be expected from the author of the Examination Schools at Oxford, ever a source of pleasure and delight to the artist. How different these

Messrs. Burnet, Son & Campbell's contribution in the same competition. The plan however, is admirable and by far the best submitted. The large pen drawing by which this design is illustrated, is by Mr. Raffles Davidson and a good example of his well-known manner. Another capital drawing by the same hand illustrates Mr. Basil Champneys' excellent design for his Memorial Building and Museum, Winchester College.

That great master of his Art, Mr. Norman Shaw, R.A., is represented this year by two works, one a country house "The Hallams," Surrey; and the other the Church of All Saints, Swanscombe, Kent. The latter is simple and dignified in treatment, with a low square Tower with raking Battlements, and the former with half-timbered Gables and well managed outline; both works are illustrated in the old fashioned orthodox way, good line drawings in themselves, but not fair to the architect, considered as illustrations of his

Carøe, E. P. Warren; of Mr. Jackson's "Ridley College Chapel," of Mr. Leonard Stokes' dignified design for "All Souls' Church, Peterboro," and Edwalton Church, and the "Sundial in Wharton Park," by Messrs. Brewill and Baily, of Nottingham, of contributions by Messrs. Arnold Mitchell, Gerald Horsley, C. E. Mallows; of these and many others we hope to speak another time. Suffice it to say, in conclusion, just now, that, speaking generally, the Architecture at the Royal Academy this year is well above the average.

TEN additional almshouses for aged poor were opened upon the site in Weelsby Street, Grimsby, last week. Seven of the houses are being paid for out of the trust fund connected with the Sailor's and Fisherman's Harbour of Refuge, and the remaining three are presented by the Manchester, Sheffield and Lincolnshire Railway Company, Mr. Jack Sutcliffe, and Mr. J. Ellis.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,

7th May, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

WHY does the Government allow the magnificent site in Waterloo Place, on which Her Majesty's theatre once stood, to remain so long vacant? The Government is the ground landlord. The loss in interest on the money value of the estate alone, it is estimated, represents several thousand pounds a year, while the place with its dilapidated boardings and partly demolished buildings is an eye-sore to a district in the very heart of London life.

THERE is at present some danger of a very remarkable collection, which should long ago have been secured for one of our National Museums, leaving this country for America. The wonderful series of specimens of wood-carving which belongs to Mr. George Alfred Rogers, seems likely to become the property of a Boston syndicate, because the South Kensington authorities lack either the inclination or the means to secure it. It certainly seems a pity that so many well selected examples of an Art which has lately shown in this country such evidence of vitality, and which is decoratively so important, should be made permanently inaccessible to the vast majority of the very workers who would find them of the greatest possible value. Such a collection should certainly find a place, if not at South Kensington, in one of our most influential technical schools. The gathering together of these unique specimens has been a work of many years. It was commenced by Mr. William Gibbs Rogers, the decorator of Kensington Palace, the Waterloo Chamber at Windsor Castle, Carlton House, and other buildings, who had, perhaps, unprecedented opportunities of securing both in this country and abroad the best examples of the work of many schools, and who built up the collection with what are now priceless productions of the greatest masters of wood-carving. His zeal in hunting for rare pieces of work was inherited by those who followed him, and no trouble has been at any time spared to make the collection in every way complete. And not the least of its merits is that in its selection it represents the tastes and artistic opinions of men who have always been among the chief exponents of one of the daintiest of the Decorative Arts.

WE very much regret to hear that there is the very smallest possibility of Sir

Frederick Leighton being able to return to Society and to his artistic career. His position as President of the Royal Academy he will, in all probability, resign.

MR. FRAZER, assistant curator of the Walker Art Gallery, Liverpool, in a paper on "The Influence of Art," read before the Liverpool Literary and Philosophical Society, emphasised the necessity of technical excellence. In regard to Art patronage by municipalities, he thought the influence of works of Art on the poorer classes was more direct than commonly supposed; and he defended public patronage as tending to encourage valuable and original effort whilst being superior to cliques. Here Mr. Frazer indulged in a fling at the "common critic," whose foible was to glorify one or two Schools and to condemn every other. For himself, he regarded as acceptable both pre-Raphaelites, Impressionists, French posters, and the nude, and said D. G. Rossetti, Millais, and Holman Hunt did in modern Art what Giotto did in discarding Byzantine traditions. Liverpool was the first place in which the merits of this School were recognised. Referring to French Art posters and the nude, he denied that there was such a thing as unclean Art, but that as Mrs. Grundy equally regarded as "objectionable" works by Sir F. Leighton, Sir Noel Paton,

THE offer of Messrs. Darbishire and Smith, architects, Manchester, to prepare, for thirty-five guineas, plans and specifications of a Pavilion not to cost more than £1,000, and to seat from 8,000 to 10,000 people, at the Welsh National Eisteddfod, in 1896, has been accepted by the Executive Committee. Messrs. Darbishire and Smith were the architects of the Rhyl Pavilion, and that gave such satisfaction that the Llandudno Committee were unanimous in engaging them to design the Pavilion for the 1896 Eisteddfod. The Committee also decided to ask Lord Mostyn for the tenant right of a field in Vaughan Street, near the station, on which to erect the Pavilion.

FASHIONED by Mr. H. L. Brown's workmen, the key for presentation to the Duchess of York on the occasion of the opening of the new wing of the Sheffield Public Hospital is composed of 18-carat and 22-carat gold. It possesses the merit of being made and designed in Sheffield. The device has been cunningly wrought, and the waste involved in the process is shown from the circumstance that the ingot from which it was fashioned weighed six ounces at the outset, and was reduced in the course of manufacture to 10z. 12dw. 6grs. The design is in the style of the French Renaissance. The head of

the key is lyre-shaped, surmounted by a crown. It contains a Maltese cross, two fleurs-de-lis, and strawberry leaves. There are 22 diamonds from Jagersfontein of fine quality. The shank is of 18-carat and the crown of 22-carat gold, the more valuable metal being utilised for the upper portion in order to allow of the enamelling process being carried out the more freely. The enamel represents very faithfully the emerald, the ruby, and ermine. The pattern is carried out on both sides of the key, the complete crown being thus represented.

THAT gigantic wheel, one of the features of the forthcoming great Exhibition at Earl's Court, is likely to be overshadowed by legal difficulties. Lieutenant Graydon, late of the United States Navy, the inventor and patentee of the great wheel, has,

through his solicitor, Mr. E. Kimber, M.P., served notice on the directors of the Gigantic Wheel Company, of whom Admiral Sir W. Dowell is chairman, holding the Company responsible for any deviation from the terms of the license under which he gave them authority to erect the wheel at Earl's Court. The periphery of the great wheel, which has been constructed by Messrs. Maudsley, is now finished. It is an enormous erection, and it can be seen miles away in the outskirts of London. The wheel has been carefully put together under the supervision of engineers of the London Council, who will thoroughly test it. Lieut. Graydon estimates the value of his title in the Graydon Wheel at Earl's Court at £50,000, and he states that he is prepared to uphold his rights by legal action. Similar wheels are to be put up in Paris, Berlin, Vienna, Madrid, Rome, and St. Petersburg. In the meantime the carriages are ready for the Graydon Wheel at Earl's Court, and it is thought that it will soon be ready to go round.

AN important meeting in connection with the building trades was held at Retford, in consequence of a communication received from the local secretary of the Amalgamated Society of Carpenters and Joiners. It was



A MODERN HOUSE: PAUL OGDEN, ARCHITECT.

and Michael Angelo, the sooner that person ceased to be heard of the better.

THERE was a time when sign-painting was not considered unworthy of the attention of great artists, and the Royal Oak at Bettws-y-Coed is not the only hostelry in which famous painters have proved their gratitude for good cheer by leaving proofs of their skill. Among those who have thus condescended are included Jean Goujon, Gericault, Horace Vernet, Hogarth, and Watteau. Of late, however, this branch of Art has not flourished. In England pictorial signs have been almost confined to public-houses; and though in remote places the wandering cyclist or pedestrian may now and then see an old sign which suggests real character and power, such cases are now very rare. A Committee has now been formed in Brussels with the object of reviving the art of sign-painting, and prizes have been offered in connection with an Exhibition which will be held in the Belgian capital next July. The names of as many as fifty intending competitors have already been sent in. The promoters have been encouraged by the success of recent efforts to improve the designs and colouring of pictorial posters, a change from which, thanks to the help of several capable artists, the walls of Brussels have gained largely.

ultimately agreed that 6½d. per hour be paid to skilled workmen; that 56½ hours be a week's work; overtime at the rate of time and a quarter after 56½ hours; Christmas Day, Good Friday, and Sunday to be considered as overtime; all jobs within three miles be walked one way in employer's time, at the rate of three miles per hour; beyond three miles and under 20, all lodgings and travelling expenses to be paid weekly; beyond 20 miles, travelling expenses not less than once a month, and all lodgings. Town workmen sent to jobs over three miles from the shop shall not put an end to this engagement or be discharged except the job be finished or in case of neglecting their employment.

At the sale of the Art treasures of the late Duchess of Montrose, some very fine old silver was for disposal. A square-shaped salver, engraved by Hogarth, and the companion salver, was sold at 60s. per ounce; a large plain James II. tankard, at 36s. per ounce; a plain circular punch bowl, at 101s. per ounce; a Scotch quaigh, engraved with flowers, at 91s.; a pair of fluted column candlesticks, at 40s. per ounce; a set of three shaped tea caddies, chased with flowers, at 36s. 6d. per ounce; a falcon, won by Pic Nic, 1848, at 10s. 3d. per ounce; a plain punch bowl, at 13s. 3d. per ounce; a large ivory tankard, mounted with silver, £110; a parcel gilt Swedish tankard, £19, and a larger tankard on ball feet, the lid repoussé with the adoration of the Magi, £46—very good prices, considering the present state of the Silver Market.

The following British artists have sent pictures to the International Art Exhibition, Venice: Sir Edward Burne-Jones, Henry Coleman, John Collier, Henry Davis, Melton Fisher, Arthur Hughes, Edward Hughes, Hubert Herkomer, William Hutton, Holman Hunt, Sir Frederick Leighton, William Logsdail, Sir John Millais, Clara Montalba, Walter Oules, Alfred Parsons, Briton Rivière, Alma Tadema, and George Watts.

AN unknown and, therefore, all the more generous donor, has offered to the City of Liverpool a plot of land covering 108 acres, laid out as a recreation-ground. The City Solicitor states he is not at liberty to mention the name of the donor. There are some buildings on the land, the rents from which will nearly pay for the maintenance, leaving only a small charge on the City.

LONDON's latest lung—Deptford Park—is about to be laid out by the London County Council at a cost of £3,140. A cricket and general recreation ground will be formed, with a broad encircling raised path, margins planted with trees, &c. The scheme provides for sowing the recreation ground with grass seed, which means that it will probably not be available for games until the summer of 1898. If the area were turfed it could be opened for games next year, but the Council has not felt justified in increasing the cost by £910, which would be the additional expense of turfing the ground.

It is proposed to celebrate in November next the 200th anniversary of the death of Henry Purcell, and to raise a memorial in his honour. The celebration will take the form of a performance of some of the finest of his sacred works on a grand scale in Westminster Abbey, and for a memorial, it is proposed to provide a suitable case for the magnificent organ in the Abbey, which still

contains stops believed to have been part of the organ on which Purcell played. The cost is estimated at £2,000, and towards this amount the Dean and Chapter have promised £500.

BRISTOL must be added to the list of towns in which you may find prudes on the prowl. From that town has recently been addressed an indignant protest to the editor of the "Art Journal," concerning the character of the illustrations which adorn that decorous magazine. The writer of the protest follows the accustomed lines, finding fault with the "Art Journal" as a publication harmful to



TOWER OF THE NEW "OLD SOUTH CHURCH,"
NEW BOSTON, U.S.A.

the young, and abounding with "nudes and horrors." Oddly enough, the number that seems to have caused this fine show of indignation is the Easter one, which is devoted to an interesting account of the life and work of Sir Noel Paton, and is filled with reproductions of the very pictures that have made him the favourite artist of the large class of people who crave for symbolical and devotional art. To accuse him of "demoralising youths and maidens" seems hard. Are they not demoralized already?

THE bust of Shakespeare which has been presented to the Shakespeare Memorial Theatre at Stratford-on-Avon by the family of the late Sir Richard Owen, has had an interesting history. It has been regarded as a plaster copy of the original bust which formerly stood in the old Duke of York's Theatre in Lincoln's Inn Fields, and which, on the demolition of the theatre, passed to Mr. Clift, curator of the Museum of the College of Surgeons, through whom it became the property of his son-in-law, Professor Owen. He sold a Shakespeare bust to the Duke of Devonshire, who presented it many years ago to the Garrick Club, where it is at present.

There is ground, however, for thinking that the Garrick Club bust is in plaster while the one at Stratford is in terracotta; and the question arises whether, after all, the latter is not the identical bust that was formerly in the old Duke of York's Theatre, where it is believed to have been placed in the reign of Charles II. The point may be worth examination, as the theatre bust is among the earliest portraits of Shakespeare we possess.

MR. HAMO THORNYCROFT has broken through his usual custom of dealing with the figure in repose, or only in very gentle movement, and has sent to Burlington House a life-size statue of a dancer vigorously performing an energetic measure. The treatment of the lithe figure and swirling skirts is full of animation; while the modelling of the limbs and the composition of their lines are most skilful and expressive.

A HISTORY of "Punch" is bound to be capital reading. Mr. M. H. Spielmann announces that his work is far advanced, and he hopes to have it ready for publication in a few months' time. It will be in one volume, and will contain some hundred and twenty illustrations, portraits, and facsimiles. The literary side of the history, considering the amount of material at the disposal of the author, should be of great interest, and its artistic side cannot fail to be of the utmost importance when it is remembered that quite two hundred of the best artists of the present century have contributed to "Punch's" pages.

THE Town Council of Harrogate has decided to build a new Pump Room, for supplying the magnesia and some of the chalybeate waters. It will be erected at the top of the Valley Gardens, and will be constructed mainly of glass and iron, from designs by Messrs. Lockerbie & Wilkinson, of Birmingham, at a total cost of £1,035 10s. 8d. Contracts have been let to Lockerbie & Wilkinson, of Birmingham, and Mr. J. Stephenson, of Harrogate. The plan will be octagonal, 24 ft. across, with domed roof surmounted by a turret.

To minimise the danger of fire, it has been decided by the authorities of the South Kensington Museum in agreement with the Commissioners of 1851 to substitute concrete and mosaics for wood as materials for the floors throughout the east and west galleries, where the science collections and the valuable Indian Section, including the silks and other fabrics, are situated. The work has already been commenced, and will be completed in the course of the summer. It is noteworthy that for the mosaic decorative work, Italian workmen will be employed, as was the case with the tessellated floor of the adjoining Natural History Museum. It would appear that the Italians have almost a monopoly of this kind of decorative flooring.

THE Bridgnorth and South Shropshire Infirmary has been founded for upwards of sixty years, and the old building has been to modern eyes singularly ill-adapted for the work it was designed to accomplish. The new building, of which the foundation-stone was laid recently, is designed by Mr. E. C. H. Maidman, Edinburgh. The administrative block will face the roadway, and have an easterly aspect; the out-patient department is at the south end, and the kitchen, &c., at the north, the wards being on the west side. The hospital will accommodate all the patients on the ground floor, and provision is made for eighteen beds—viz., eight in the male ward, eight in the female ward, and two in a spare ward.

A DOCUMENT from the Works Committee sets forth results of a large number of works carried out. In October last, it will be remembered, the Committee reported on 32 jobs which had been carried out at a total cost of £63,061 or £3,000 less than the estimates. The Committee has now furnished particulars of thirty further undertakings, including the erection of buildings at Poplar and Blackwall Lane—in connection with which large unexpected expenditure was incurred—and the painting of Hammersmith Bridge, which, being carried out in mid-winter, and under circumstances of quite exceptional disadvantage, cost far in excess of the estimate. Despite these drawbacks, however, the total expenditure of the 62 works comes out at £178,863 as compared with the estimate of £176,086—or a deficit of only 1½ per cent. These figures constitute a justification of the department, for it must be remembered that the expenditure includes the cost of starting and organising the department. Mr. Holloway, the manager, further reports that works amounting in the aggregate to £230,544 are in hand, and upon them a balance on the right side is certain to be returned. This is essentially satisfactory.

IN connection with the Empire of India Exhibition at Earl's Court, an "Earls Court Art Union" has been established by the authority and under the sanction of the Board of Trade. The London Exhibition (Limited)—the proprietors of the exhibitions—purpose setting aside 15 per cent. of the gross amount received for season tickets, for the purchase of works of Art to be given as prizes in the drawings in which only season ticket holders will be permitted to participate. There will be 102 prizes, amounting in value to £172 15s. for each 2,000 tickets sold. This is one way of promulgating "Art"—the wrong way.

At the annual dinner of the Sheffield Master Builders' Association it was stated that unsuccessful efforts have been made to induce the Sheffield Architects to adopt what is known as the London Agreement, under which, in case of dispute, reference is allowed to a third person, but the hope was expressed that some arrangement would shortly be arrived at which would do away with the cause of complaint that the Sheffield builders contend they have at the present time.

ANOTHER meeting of the Committee of the Carlyle House Purchase Fund has been held at the residence of Dr. Garnet, C.B., British Museum. The secretary's report showed that considerable progress had been made in the matter of repairs and other

things necessary for the preservation of the house. It will be opened to the public as a museum containing many things of great interest in connection with Carlyle, but in the repairs and alterations changes only that are absolutely essential will be made, so that the house may be preserved for the nation in as near as possible the same condition as when Carlyle occupied it.

"GROOTE SCHUUR," i.e., "the large granary," South African home of Mr. Cecil Rhodes, or rather the picturesque old building which forms its nucleus, is a building which more than a century ago was occupied by an ancestor of the now famous Mr. Hofmeyr. A few years ago the homestead was simply a fine old Dutch house with a moderate extent of land attached. Mr. Rhodes, however, has enlarged it in height, has built a new wing, (containing *inter alia* a billiard room), and by adding on property after property to the original twelve acres has increased the estate to one compact block of about 1,000 acres, extending along the slopes of the "Devil's Peak" of Table Mountain for about three miles. In his restorations and enlargements Mr. Rhodes has not only preserved the monuments and memorials of the bygone residents of "Groote Schuur," but has done his best—and with great success—to retain the old quiet dignity of the Cape Dutch house. From a detailed description we learn that



AN OLD DUTCH HOUSE IN SOUTH AFRICA RESTORED FOR MR. CECIL RHODES.

every new thing in the house has been specially designed, and wherever possible hand-made by Colonial workmen. The dining room, library, and an adjoining room are panelled from floor to ceiling in plain teak panels. Antique Dutch is the prevailing character of the moveables in Mr. Rhodes' residence. Many of the articles, including the best, have been bought in the Colony, and but few have come from Europe. All are in excellent preservation, and some are as perfect as when they came from the hands of the old cabinet-makers who understood their craft so well. Dutch clocks, Dutch chairs, and Dutch wardrobes figure prominently in the various rooms. On the walls rich old tapestries, old prints, and old paintings, the latter including the portrait of a lady by Sir Joshua Reynolds (heirlooms of the Rhodes family), and a representation of Capetown and Table Mountain as they appeared early in the century, meet the eye. This painting is attributed to Richard Wilson, R.A.

THE disaster which befel St. Mary's Church, Shrewsbury, by the fall of a large portion of the spire and the demolition of the Nave during the great gale of February, 1894, aroused widespread interest and sympathy, and produced a liberal response to the appeal for funds which was issued by the vicar, the Rev. N. Poyntz. In the course of a few months between £8,000 and £9,000 was con-

tributed. The restoration has necessitated the expenditure of the whole of the money subscribed, and there are still parts of the edifice which need attention. The architect is Mr. Lloyd Oswell, Shrewsbury. The re-opening services have been held.

THE Earl of Ashburnham's collection of Greek coins to be sold this week at Sotheby's, consists of 253 coins, and, for its extent, is a singularly fine and most representative series. There is a romantic legend attached to the subject, that Lord Ashburnham, who was an enthusiastic collector in his younger days, carried his cabinet of coins about with him in his yacht; that some pirates amongst the Greek Islands captured them, and in consequence he gave up his hobby. But afterwards, accidentally seeing one of them exposed for sale at a dealers, he bought it, and subsequently from time to time made fresh additions to this small nucleus. The present collection consists mainly of the series acquired by Mr. Samuel Addington, a well-known collector, most of them coming from Lord Northbrook's sale in 1859. Others were obtained from Mr. Wigan. Amongst the most valuable items the following may be specially noted:—The three gold staters of Tarentum, the silver distater of Thurium, gold drachm of Bruttii, remarkable tetradrachm of Agrigentum impressed with the figures of two eagles tearing a hare (415 B.C.),

and showing on the reverse the monster Scylla; an archaic tetradrachm of Catana, struck before 476 B.C.; a tetradrachm of Segesta, with reverse figure of nude hunter accompanied by two hounds; two very fine medallions of Syracuse, one by Kimson, bears his signature in full, the other by an unknown artist, of whose workmanship only a second instance is known to exist; gold stater of Chalcidice, with head of Apollo, coined about 392 B.C.; a most beautiful tetradrachm of Amphipolis; a tetradrachm with remarkable portrait of Perseus; gold staters of Philip of Macedon, one being a unique variety coined at Rhodes, and bearing the Rhodian Magistrate's name; a gold stater of Pyrrhus, King of Epirus, with the head of Pallas, and on reverse a figure of Victory carrying a trophy; a remarkable silver stater of Delphi, believed to be unique, having a ram's head with dolphin under it on the obverse; a tetradrachm of Lacedæmon, with portrait head, attributed to Areus, King of Sparta; silver stater of Stymphalus, a town of Arcadia, with Hercules striking with his club (a very fine example of die-work); a series of the Kings of Syria; a number of staters in electrum (an alloy of gold and silver, occurring naturally as well as artificially produced); gold tetradrachms and a gold octadrachm of Egyptian monarchs; and a silver tetradrachm, bearing the portraits of Mark Antony and the celebrated Cleopatra.

THE Roman Catholic Church of S. Bridget, Liverpool, which has been in course of erection for two years, has now reached completion, and will be opened on the 26th, when it is expected that Bishop Whiteside will officiate. The Early English style has been followed, and the Church consists of Nave, Chancel and Aisles, and is principally lighted by triplet windows over the arcades, the pillars of which are of granite. The roof, floor and seats are of pitch pine. The Church has been built by Messrs. Roberts & Robinson, from designs by Messrs. Sinnott, Sinnott & Powell, Architects, of Harrington Street, Liverpool.

HE who had the cultured taste to bring together the collection now on view at the Goupil Gallery was, without doubt, a connoisseur. His treasures—and they are veritably such—convert the room which contains them into a miniature Museum of Art. Here are bronzes of Old Japan, of Antique Greece, of Ancient China; curious Persian brasswork as incense-burners in the form of peacocks incrustated with turquoise; a fine plaque of Japanese lacquer, decorated in low relief of ivory, with spirited figures; exceptionally handsome Chinese *cloisonné* vases, Damascus pottery, and ceramics of Italy, China and Spain. The mere enumeration of these things gives an idea of their collector's catholicity of appreciation, but the objects themselves must be inspected to judge of the soundness of his choice in each class. Most valuable of all, or, at any rate, the most actually beautiful section is that of Tanagra figurines, for they are in first-rate preservation, and are gems of sculptural grace, besides being extremely varied in character, of drapery-casting, attitude or movement. The pictures and drawings evince similar judgment in selection, and are most interesting.

THE London County Council has resolved to purchase a strip of land at the eastern corner of Wellington Street, at its junction with the southern side of the Strand, with a view to round the corner of the former thoroughfare, and increase the width of the latter at this point from 68 to 80 feet.

It is well known Birmingham Art Students are singularly successful in competitive work, and that the high record of past years is more than maintained is proved by the last report of the School of Art Committee just issued. The report states that in 1891, 1892, and 1893, the School stood conspicuously at the head of the Provincial Schools of Art in the national competition, and high as was the standard thus created, the School retained its position in 1894 even more markedly than in previous years. This development was unique in the history of Schools of Art. Whereas 28 medals and national book prizes were obtained in 1886, the total last year was 76. The nature of the works rewarded was also satisfactory as showing the influence of the School upon every branch of the artistic work, and especially upon the industrial arts of the city. A gold medal was awarded for modelling from the life; of 12 silver medals, six were obtained for modelling and modelled design, two for measured architectural drawings, two for design, and two for painting; of 18 bronze medals, seven were for modelling and modelled design, seven for design, two for painting, one for architectural drawings, and one for studies of heads from life; and of 45 national book prizes, 24 were for modelling and modelled design, seven for design, seven for painting, five for architectural design and drawing, one for etching from Nature, and one for historic ornament. These awards included two silver and two bronze medals and five national book prizes, all awarded either for modelling or design, to students of the Victoria Street Branch School—an award exceeding that of many Central Schools of Art, and which is regarded as very encouraging to a Branch School mainly intended for students in the jewellery and kindred trades. In 1894 there were 458 candidates for the free admissions and scholarships provided by the endowment funds, against 384 in 1893.

THE Church of St. David, Denbigh, erected by Mr. Lloyd Samuels, of Wrexham, from designs by Mr. Lloyd Williams, architect, Denbigh, has been consecrated. It is in the Early English style of architecture, and cost £2,000, exclusive of the Chancel which was given by the late Dr. Turnour and cost £1,500. The Church will accommodate 700 persons. A fine Reredos of alabaster, representing "The Last Supper," has been placed in the Chancel, at a cost of £350, subscribed for as a memorial to Dr. Turnour by his friends. The Pulpit, of pure alabaster, given by the Misses Townshend, and the Reredos are the work of Messrs. Earp & Hobbs, of London, whilst an alabaster Font and a costly copper-brass Lectern (also gifts) are the work of Messrs. Jones & Willis, of Liverpool. The Nave is divided from the Chancel by a beautifully-worked Screen of copper-brass. The Choir Stalls are worked up from the old oak, and are very effective. In the east end is a stained window, and also



THE CLUB HOUSE, NEWBERRY STREET, NEW BOSTON, U.S.A.

two side Chancel windows by Ballantine, of Edinburgh; these being included in Dr. Turnour's gift. The entire cost of the Church, including the many gifts, has been about £6,000.

THE Church of Saint Trophune or Trophimus, at Arles (our sketch of the Cloisters is from a charming drawing by Mr. C. E. Mallows), was founded on the ruins of the Roman Prætorium and consecrated in 606. The Choir, however, is of later date, and probably of about the 15th century. The interior effect of the Church from a painters' point of view is most impressive from its simplicity of design. The different walks of the Cloisters have different dates. That shown in the illustration—the north side—is pure Romanesque and a wonderful example of the period, and dates about the 9th century. The east side dates about the first quarter of the 13th century. The west side, perhaps the finest and most interesting portion of the whole, has pointed arches, and is pure Gothic of the 14th century. The south side is later still and about the 16th.

THE black staircase in Durham Castle (now the University), is a title which well conveys an idea of its general effect. It was erected by the munificent Bishop Cosin in the year 1665. He is also responsible for the remarkable Classic Porch at the principal entrance in the Semi-Quadrangle, approached by a circular flight of steps built in front of the Gothic door of Bishop Hatfield. Bishop Cosin came into power at Durham with the Restoration, and generally restored and repaired the whole Castle. The carving indicated in Mr. Mallow's drawing is strong and vigorous alike in design and execution.

BLASTING operations on a gigantic scale were witnessed at the Penrhyn Quarry at Bethesda, when the huge cone-shaped rock, known as Talcen Mawr, which rises out of the quarry to a considerable height, and forms a picturesque and prominent feature and one well-known to the thousands of visitors and tourists who have from time to time visited these well-known and old quarries, was removed. Thousands of people flocked to the neighbourhood of the quarry to see the operation take effect, amongst those present being Lord Penrhyn. It was computed that the rock to be dislodged represented about 125,000 tons, though other estimates put it as high as 200,000 tons. The operation was quite a success, and it is expected that by its displacement the better kind of rock will be more obtainable. The boring operations in connection with the work were commenced about five months ago by three men of the name of Davies, who are brothers, and have been employed in the quarry since they were boys. A passage was cut through the centre, 20 feet long by 7 feet wide and 7 feet high, with branches at the end, right and left, forming into two chambers. These were arched in brick and cement, a small sloping tunnel being left to run in the blasting powder, which was specially manufactured, and consisted of 280 casks, each containing 56 lbs., or a total of 7 tons. This being run in through the funnel left, was laid with an instantaneous fuse, 37 feet long, bedded in clay, connected to a 20 minutes time fuse. There have been bigger blasts carried out before, but the fact of the Talcen Mawr being so well-known added additional interest to the undertaking.

THE work in connection with the building of a new Baptistery at Christ Church, Lancaster (which is being erected by subscription as a memorial to the late Vicar, the Rev. Canon Bartlett), was commenced last week, and is expected to be completed during the Autumn. The Baptistery will be carried out at the West end, under the West window—an Arcade of three arches being inserted under the window, the piers having shafts and caps forming the pedestals to two figures of angels bearing shields, with emblems, carved in the solid stone. The centre portion of the Baptistery containing the Font will be a semi-hexagonal Apse in plan, having mullioned windows with traceried heads in each side, flanked by two smaller side windows. The roof will be of panelled wood, covered with lead. The stone used throughout will be Lancaster stone. The contractors are: for masonry, Mr. T. Mawson; for joiners' work, Messrs. R. S. Wright & Sons; and plumbers' work, Messrs. Calvert & Heald—all of Lancaster, the design being by Messrs. Paley, Austin & Paley, Architects, of Lancaster. The estimated cost is about £500.

As a tentative and suggestive project, Mr. T. F. Bentley, to whom has been entrusted the task of preparing plans for the new Roman Catholic Cathedral at Westminster, has sent in two admirable plans, recalling to some extent, features to be found in the great Churches of San Ambrogio, San Vitale and San Marco of Venice. The scale is 350 ft. by 160 ft., the material brick; the arrangement includes a raised monk's Choir in the Apse, and stalls for the Westminster Chapter in the Sanctuary, with a subterranean Chapel, or confessional, as in San Ambrogio. The width of the Nave is 60 ft., and the length of the Transepts 160 ft. Cardinal Vaughan has already collected, in cash and in promises, over £50,000, and donors of £1,000 will obtain the privileges of Founders. At least £100,000 will be required to roof in and complete the shell of the structure.

MR. POYNTER, the recently appointed Director of the National Gallery, has made his first Annual Report to the Lords Commissioners of the Treasury. Confirmation is given to the announcement that the Trustees have accepted the control of the collection of the modern British pictures which Mr. Henry Tate has presented to the nation. Such pictures as are considered suitable have been selected, and a deed of gift has been duly executed. Public attention is again called to the want of space for the proper arrangement of the Art treasures in Trafalgar square. In many of the rooms, the Early Flemish especially, valuable pictures are hung in places where they cannot be sufficiently seen, much less studied. Several branches of Art, notably the French School of the seventeenth and eighteenth centuries, are ill represented, and it will shortly be impossible to find space for the necessary additions.

SOME stir has been caused in architectural circles by the announcement that the important post of architect to the Ecclesiastical Commissioners, held by the late Mr. Ewan Christian, has been given to Mr. Carøe. Mr. Carøe has the misfortune to be too young a man in the view of more than one "Academic ante-chamber," albeit, he has had much experience in Church building. The position being one with large emoluments and great responsibilities, quite a number of men in the profession claim to be of mature years and sufficient age, all of which rather amuses us. It should have gone to an older Architect. The importance of the position is, of course, evident from the fact that all plans for new Churches to which the Commissioners contribute have to be approved by their architect.

WITH regard to the proposed "Restoration" of Orford Church the following, keenly controversial, has been addressed to the Committee by a recipient of the printed appeal for subscriptions:—"I have received your circular appealing for subscriptions to restore that priceless jewel—your lovely parish Church. I am, referring to the glorious portion of the fabric which remains as yet intact, and almost as its gifted creators left it. Visiting the Church, a year ago, I was charmed with the boarded-off portion (Nave, North Aisle, Chancel, Tower, South Porch, &c.), and pray you to leave it as it is, with such repairs solely as are requisite for its maintenance, as a supreme work of Art. Surely, the disastrous depuration of the South Aisle as now "restored" is glaring enough to discourage further excursion in that direction. Vulgar modern ecclesiastical small wares hideously out of place; the beautiful ancient carved seats crucified against the walls or against appalling stacks of hot water pipes slowly destroying them; their places usurped by vapid modern imitations. What has been so handled is gone for ever; sacrificed on the cruel altar of modern folly.—Larner Sugden, Leek."

The Builders' Journal.

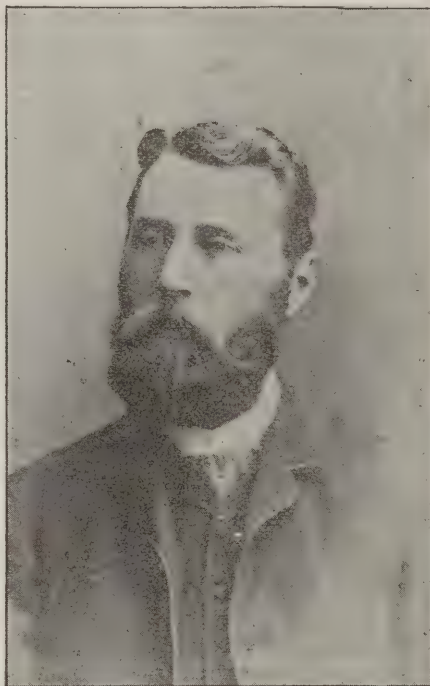
MEN WHO BUILD.

No. 12.

MR. CHARLES H. HEATHCOTE.



THREE and twenty years ago Charles Henry Heathcote commenced practice as an Architect in Manchester, and you have to look at him twice before you can believe it. Well favoured of the gods, they have trimmed his beard—as only Parisians know how—to a nicety; but that, and the unmistakable tinge of green in his tweed suit upon his back are



the only æsthetic things about him. Charles Heathcote is not a dreamer of dreams. Manchester has not room for many, and so he tolerates a telephone in his private room

in case at any moment he should be tempted that way where madness lies.

Thirty years ago this smart provincial man was sketching fonts and pew backs in Normandy, drinking Italian wines instead of the Italian "Spirit" in Florence, and anon making measured drawings of half the old Churches in England. His industry was undoubted, for, nestling among the treasures of his youth—the treasures men always linger over in their happy moods—are volume upon volume of measured sketches, all drawn to a uniform style of scale, and bound as only an enthusiast would bind them. Charles Hanson, of Bristol—one of Pugin's men—first took Charles Heathcote in hand, and when he had got a smattering of Gothic well ground into him, he migrated to Lockwood & Mawson, of Bradford, from whom he came to Mr. Salamons, of Manchester, a few months before he made a plunge for himself, at the giddy age of twenty-three. So many of our most successful men have started work before they were well out of their teens, that it seems to be a safe axiom to start early in life. At the age of eighteen Heathcote gained a silver medal of merit at the Institute for measured Church work, and the three sheets of drawings, framed, and recently covered with a respectable layer of dust, are "skied" over the mantelpiece in the private room in Princess Street; and all your persuasive energy—which has been known to move mountains—fails to bring them down from their position. When he was twenty he sent in 100 sheets of drawings for the Soane Medallion, and a roar of hearty Lancashire laughter accompanies the admission. He had more pluck in those days than he has now, and that is why he leaves competitive work as far behind as possible. What he did in the early days of practice is of little moment, but he must have trained himself for a full business career, for to this day he possesses a large practice in arbitration work, light and air questions, and party structures, and is continually commissioned for the judicious purchase of land. This in addition to his artistic work—work which has given to Manchester some of its finest, if not its merely largest, buildings.

You do not hesitate to assert that the Lancashire and Yorkshire Bank, facing down King Street, "knocks spots" off anything of the kind London can show. London, in fact, does not possess a single "house" so carefully



MR. HEATHCOTE'S OWN HOUSE AT BUXTON.

detailed and finished as the banking chamber of the Lancashire and Yorkshire Bank in Manchester. King Street has been and still is a happy hunting ground for Charles Heathcote, for the pen sketch, taken from the steps of Alfred Waterhouse's Prudential Assurance Office, re-produced on this page, shows no less than portions of four large blocks of his work, that of the Manchester Trust Company, which centres the picture and forms the subject of a photographic reproduction also, being in Mr. Heathcote's individual opinion the finest piece of work he ever did. It is interesting to examine these two illustrations and to trace the development of the design from its first conception until its final construction, the

the extension of the Blind Asylum at Old Trafford; the Institute of the Blind in Deansgate; the Convalescent Home at Southport; the Commercial Union Assurance Company, adjoining his own Lancashire and Yorkshire Bank; the Friends' Institute at the corner of Mount Street, Piccadilly (Manchester); and the additions to Longford Hall for Mrs. Rylands, for whom he designed and erected the superb Rylands' Memorial in the Manchester Southern Cemetery. It is worthy of note, and Mr. Heathcote impresses this upon you, that credit should, in this instance, be given to Messrs. J. & H. Patteson, of Manchester, to whose care and fine taste in marble work, much is due.

"There are two secrets in successful

and the architect. And these Northern fellows do just as good work, have magnificently appointed offices, compared with the frowsy dens of many Southern practitioners, and uphold the dignity of their calling in a fashion that would startle some of their London brethren. Charles Heathcote believes in the Northern method of things. From morning until night, three days a week, a continuous stream of visitors ascends to his second floor in Princess Street—contractors and clerks of works, master masons and decorators, sanitary experts, and testing and ventilating engineers—a body of workers in the great and noble art of building. Dust settles nowhere but upon those three framed drawings which won him his silver medal



A VIEW OF KING STREET, MANCHESTER, SHOWING WORKS BY CHARLES HEATHCOTE, ARCHITECT.

circular-headed window on the ground floor and the improvement of the gable end marking the earnestness of the architect. Mr. Heathcote is also erecting in King Street, adjoining the additions to the Prudential, upon which Mr. Waterhouse is now engaged, the new offices of the Alliance Insurance Company, upon a fine corner site. The fronts are in yellow stone and of reputed Renaissance in style, far more placid than the front of the Lancashire and Yorkshire, designed more in accordance with the dictates of managing directors than the dictates of reputed Architecture. Other important works in the Manchester district by Mr. Heathcote, are the Concert Hall and

practice," says Mr. Heathcote in reply to your query; "never guess at an estimate, and avoid extras—the rest, the mere designing and planning, comes easy enough." Mr. Heathcote, himself a Fellow, for some years, of the Institute, spoke only half the truth. He omitted the Lancashire grit, the mastery of difficulties, the plain upstanding determination to succeed, the freedom from the canting hypocrisy of men who teach a rotten creed of professional etiquette which they never practice. It is an uncommon thing in the North to detect a building in course of erection without discovering a notice, boldly placed in a conspicuous position, announcing the names of the building, the contractor,

eight and twenty years ago, and the whole place is a mass of life, instead of a dead philosophy which sends the dreamer home on the top of an omnibus in place of a Pullman car. The refinement of Charles Heathcote is in his methods as in his works. The front of the Manchester Trust Building, in King Street, the internal details of the Lancashire and Yorkshire Bank, the elevations of the Alliance Buildings, and the Concert Hall of the Blind Asylum at Old Trafford, are the work of a refined mind. Out at Buxton, five and twenty miles away, he has built himself a house, in which most of his designs are conceived. He finds the fifty mile daily train ride a delight.

A CHAT WITH Mr. PAUL OGDEN, HON. SEC. OF THE MANCHESTER SOCIETY OF ARCHITECTS.

THERE must be something remarkably generous in the disposition of men who devote most of their leisure moments to the fulfilment of honorary duties thrust upon them by their natural desires to do something—much or little—for the benefit of others. It must be an extremely thankless task to steer a provincial professional Society through the maze of professional etiquette and yet retain the independence due to a man practising his profession amidst the members of his Society. We do not seem to



envy the position, nor the man who by it becomes, metaphorically, the waste basket for all the ills his province is architecturally heir to. Paul Ogden himself is somewhat of a sceptic, but a kind-hearted one, ready to relieve way-farers on the road of experience, travelling towards the gates of Canaan.

The Honorary Secretary of the Manchester Society of Architects does things well. His suite of rooms in King Street—the Broad Street of Manchester—contains a reception room, quite charming in its simplicity and cosiness. He has patronised lincrusta for his dado; and his filling and frieze of blue smacks of our friend Essex, without whom so many architects would possess heavy hearts. A Chippendale overmantel, “picked up” up at a wayside cottage, adorns the mantelpiece, upon which a unique tortoiseshell jewel cabinet of wondrous workmanship almost lures you from the paths of rectitude and uprightness. Colour studies of stained glass work and frieze designs stand upon easels in the corners, and a really magnificent “grandfather,” by George Baddely, ticks away with the solemnity due to his artistic surroundings. Every perspective upon the walls is from Mr. Ogden’s own pen and brush. He himself is one of those few conscientious men who dream for love’s sake—and love to dream—down to the very dregs of idealism. Gotch’s fine work of the English Renaissance is upon the green baize table cover; and at an old escritoire in a corner by the fireplace Paul Ogden sits to chat of the Architectural instincts of Manchester. You are welcome as a being from the outer World, and an hour slips round on the face of that placid clock before you have touched upon many subjects dear to the hearts of both of you. How Paul Ogden came to settle down to practice in Manchester you do not enquire; but you remember him as a pupil—a four hundred guinea pupil—years ago in Bournemouth; and to-day he assures you that, rumours to the contrary notwithstanding, his masters did actually “carry out” a row of shops and

a suburban villa during the period of his apprenticeship. Perhaps it was this experience of architectural things that instilled him with the desire of thoroughness; that impelled him to take his coat off to study, after so many years of his young life had been almost wasted; that taught him to rely upon himself when others failed him. Paul Ogden is thorough beyond all things. He can trace the development of Gothic design as few others can trace it; he can get a precedent for everything he does, and a reason for everything he does not, and no worldly consideration would tempt him to violate the requirements of good work. Although the drawings of the first house he ever built hang in their allotted place upon the wall, he retains them as a beacon light whereby to steer his future course.

The Society over which Paul Ogden holds secretarial sway was instituted more than thirty years ago. It is one of the most prosperous Architectural Societies out of London. Its library is not extensive—it contains some 400 volumes—and the magnitude of the fine collection of books at the Institute in Conduit Street may be fairly judged by the fact that at Manchester, during the past year, only nine volumes were taken out for reference purposes. In the Metropolis of the North the one important question exercising the minds of architects and contractors alike is the vexed one of depositing priced quantities. Mr. Ogden has naturally had this matter very vividly before him, and goes into all its various details for your benefit. For many years the practices of contracting have remained in a very undignified condition in the North. Architects there are who insist upon letting their contracts to separate trades, others who let the whole lot to one contractor, who himself enters into sub-contracts, but is directly responsible to the architect for the whole work. There can be no question which is the most costly proceeding, and which entails the most labour upon the architect. Many instances have recently occurred in which the non-depositing of the priced quantities by the contractor has led to many unseemly disputes, and efforts have been made to bring the matter to a head. On the 21st of November last the

would give a definite reply, they passed the following resolution:—“That in reply to the letter of the Society of architects, the question be asked whether the Architects will agree to the quantities being taken, and the accounts squared up at the completion



A LODGE: BY PAUL OGDEN.

of the building, by an independent surveyor, and that the quantities form part of the contract.”

The reply to this was:—“That this Committee (of the Manchester Society of Architects) is not prepared to recommend any interference with the *individual practice of Architects* in respect to making out quantities. It is, however, prepared to advise making the quantities a part of the contract.”

And here the matter sticks, except that a meeting of architects was held about a month ago with little result. To aid in the settlement of the matter, Mr. Ogden prepared a schedule of answers from various Architectural Societies in the Kingdom—from Glasgow, Dundee, Leicester, Birmingham, Leeds, Nottingham and Sheffield—and it was found that custom and opinion were as wide apart as the Poles.



A HOUSE BY PAUL OGDEN, ARCHITECT.

following question was asked—by the Subcommittee of the Manchester Society of Architects—of the Building Trades Association:—

“Whether, in the event of the Society undertaking to recommend their members to subdivide the contracts into the different trades, the members of your Association would be prepared to deposit their priced quantities with the architects?”

Before the Building Trades’ Association

ST. BRIDGET’S new Church, Bevington Hill, Liverpool, which is to be opened on the 26th inst., is not by any means a pretentious structure externally, although it is in its internal aspect particularly attractive and comfortable. Built to accommodate about 650 worshippers, it consists of a Nave, Chancel, and Aisles, the lines of demarcation between the last-named and the main body of the Church being indicated by massive columns of blue-grey granite from County Down, the bases and capitals of these consisting of stone, which gives an admirable contrast to the highly-polished columns, and which in the capitals will give scope for neat sculptured work when additional funds afford it. The roof, which is lofty, shows massive pitchpine in the woodwork, from which material the solid-looking pews, &c., are also formed. The light, which is admitted principally from triplets in the Clerestory is also good. The Organ-loft overlooks the Chancel, from which it is separated by a beautiful Screen, in which small columns of the beautiful Irish granite already described are apparent.

DO LOW FIREPLACES GIVE MORE HEAT?

THE supposition that fuel burnt in a low fire gives out more heat, has arisen from the experimenter not reflecting that his hand held over the low fire feels not only the heat radiated from the fire itself, but also that reflected from the hearth close beneath it, which second portion, if the grate were high, would have room to spread or radiate downwards and outwards to the more distant floor or carpet, and to warm them. The notion that the fire, because near the floor, must warm the carpet more, springs from what may be called an error in the logic of the reasoner, who is assuming that the hearth, floor and carpet, being parts of the same level, are in the same predicament; the truth being, however, that in such a case the portion of the hearth which is within the fender gets nearly all the downward rays, and the carpet almost none—as a candle held before a looking-glass at a moderate distance diffuses its heat pretty uniformly over

THE CHURCH OF LORD BEACONSFIELD.

HUGHENDEN Church stands within the park of Hughenden Manor, at its furthest extremity. It is of flint and stone, and is almost entirely modern, having been rebuilt in 1875. The account of the Church given in "Cathedrals, Abbeys, and Churches," for May, says it is effectively placed upon the slope of the hill, and is almost surrounded by trees. The very first object which strikes the eye of the visitor in the neatly-kept churchyard, is the Tomb of Lord Beaconsfield. The three red granite panels which contain the inscriptions, are built against the outer wall of the De Montfort Chapel at the eastern end of the Church, closely adjoining the Chancel. The effect is somewhat inelegant, and the low iron railing which surrounds the wreath-strewn space is most unornamental. The right-hand panel commemorates Mr. James Disraeli, third son of the author of "The Curiosities of Literature"; that to the left Mrs. Sarah Brydges-Williams, who left Lord Beaconsfield a fortune, "and was buried at her desire in this vault." Upon the central panel is inscribed: "In memory of Mary Anne Disraeli, Viscountess Beaconsfield in her own right, for thirty-three years the wife of the Right Honourable Benjamin Disraeli, Lord of this Manor; ob. December, 1872." Beneath are the simple words, "The Right Honourable Benjamin Disraeli, Earl of Beaconsfield and Viscount Hughenden, K.G., born December 21, 1805; died April 19, 1881."

Over Lord Beaconsfield's accustomed seat in the Chancel, now marked by a brass plate with an inscription, is the beautiful tablet of Sicilian marble, erected by Queen Victoria. By the side of the memorial are fixed the banner and insignia, removed from St. George's Chapel, Windsor, of this "most noble and puissant Prince," as every Knight of the Garter is described, upon his stall. The stained glass in the east window is the executors' tribute to Lord Beaconsfield's memory. The large west window was filled with stained glass with part of the "National Memorial Fund"; and the south window was the offering of Oxford Undergraduates.

SEWAGE DISPOSAL IN HAVRE.

THE City of Havre has practically no system of sewerage, its sanitary condition, like its architecture, being still mediæval. The result of defective drainage and sewerage are polluted subsoil, damp foundations, sodden and tainted basement walls, and sewage laden gas atmosphere. The soil in the low lying sections of the city is always saturated with water, charged with pathogenic matter, and the foundation walls of the houses are in direct contact with the soil. Added to this most insanitary conditions of the dwellings, the atmosphere is poisoned by exhalations from cesspools and privies situated either in

the building or courtyard. Rain and household water run along the street gutters and pass into the harbour. At times, under the pressure of epidemics, the quantity flowing along the gutters is increased by a system of flushing, which carries an increased quantity of decomposed organic matter and street filth into the docks or harbour; but even this system of transferring filth from one part of the city to the other is practised only during epidemics. The method of getting rid of excretal matters is the most primitive and dangerous imaginable, consisting in placing small moveable receptacles beneath the seat into which the excreta fall. When full the receptacles are removed and carted off in large vans to be emptied and cleaned, being replaced meanwhile by fresh receptacles. The vans, laden with the contents of many privies, traverse the most frequented streets during business hours, filling the air with noisome and most unwholesome, unhealthy emanations. To say nothing of the unsightliness of the vans when moving in procession, they frequently stop in front of the open doors or windows of dwellings as long as it may suit the convenience or pleasure of the drivers, who seem quite unconscious of the nuisance they are causing. Under such an insanitary regime, no surprise need be felt that Havre, with all its natural advantages of climate and locality, was scourged by cholera in 1892; by an unusual prevalence of diarrhoeal and dysenteric diseases during the summer of 1893; by an epidemic of small-pox in the spring; and one of typhoid fever in the autumn of 1894. Notwithstanding the admirable situation and unsurpassed climate of Havre, its rate of mortality is more than that of London.

New Union Offices are shortly to be erected at Townhead, from plans by Messrs. Butterworth & Duncan, of Rochdale.

A NEW Church, &c., is to be built at Ystrad Rhondda, Ystradfogwg, Glamorganshire, from plans by Mr. E. M. Bruce Vaughan, of Cardiff.

THE Urban District Council of Radcliffe, Lancashire, are about to build a new Technical School in Whittaker Street, the architect for which is Mr. E. Grundy.

TENDERS are being advertised for for a new Lecture Hall and School at Consett, Durham, Messrs. Armstrong & Knowles being the architects.

THE Congregation at the Northcote, Street Baptist Chapel, Stockport, have decided to build a new Chapel in Bowerfield Lane, at a cost of £2,500.

The Memorial Stone of the new Liberal Club, which is being erected at an estimated cost of £600, in Leeds Road, Wind Hill, Leeds, was recently laid by Mr. T. Ellis.

THE Newcastle Dental Hospital, which is situated at the corner of Nelson Street and Clayton Street, was formally opened by the Mayor of Newcastle, Alderman W. H. Stephenson, on Monday afternoon, the 22nd ult.

A NEW Church erected in the Micklehurst portion of Mossley, which is dedicated to All Saints, was recently consecrated by the Bishop of Chester. The Church has long been needed, and the full cost of erection and furnishing will reach £4,000.

Vandyck's portrait of the Marchese d'Isipola has been sold by auction for 50,000 dols. to Mr. Sedelmeyer, of Paris. This is the highest price ever realised in America at an auction sale for a single canvas, although two Meissoniers together once brought 66,000 dols.

ON Saturday, six memorial stones of a new Wesleyan Sunday School in Church Lane, Marple, were laid. The new School is being erected on the site of the old erection, and will mark the Centenary of the Sunday School Institution in Marple. The cost is estimated at about £1,500.

AN addition is about to be made to the premises of the Young Men's Christian Association at Glasgow, of a building which is to serve as a Residential Club for young men, and a Bible Training Institute. It is expected that the extension, including the furnishing, will cost about £25,000.



THE MANCHESTER TRUST BUILDING, IN KING STREET: BY CHARLES HEATHCOTE.

the whole, but if moved close to one part of the glass it overheats and probably cracks that part, leaving the rest unaffected. A low fire on a heated hearth is to the general floor or carpet of a room, nearly what the sun, at the moment of rising or setting, is to the surface of a field. The rays are nearly all shooting upwards from the surface, and the few which approach it slant obliquely along, or nearly parallel to, the surface, without touching, and therefore without warming it. Striking proof of the facts here set forth is obtained by laying thermometers on the floors of a room with a low fire, and of a room with a fire, as usual of old, at a height of about 15 or 16 inches above the hearth. An experiment tried in two such rooms, in both of which thermometers on the pianofortes, four feet above the floor, stood at 62 degrees, showed the carpet not far from the hearth to be at 56 degrees with the low, and at 73 degrees with the high fire.

A SILK AND TECHNICAL SCHOOL FOR LEEK.

REVIVING AN ENGLISH INDUSTRY.

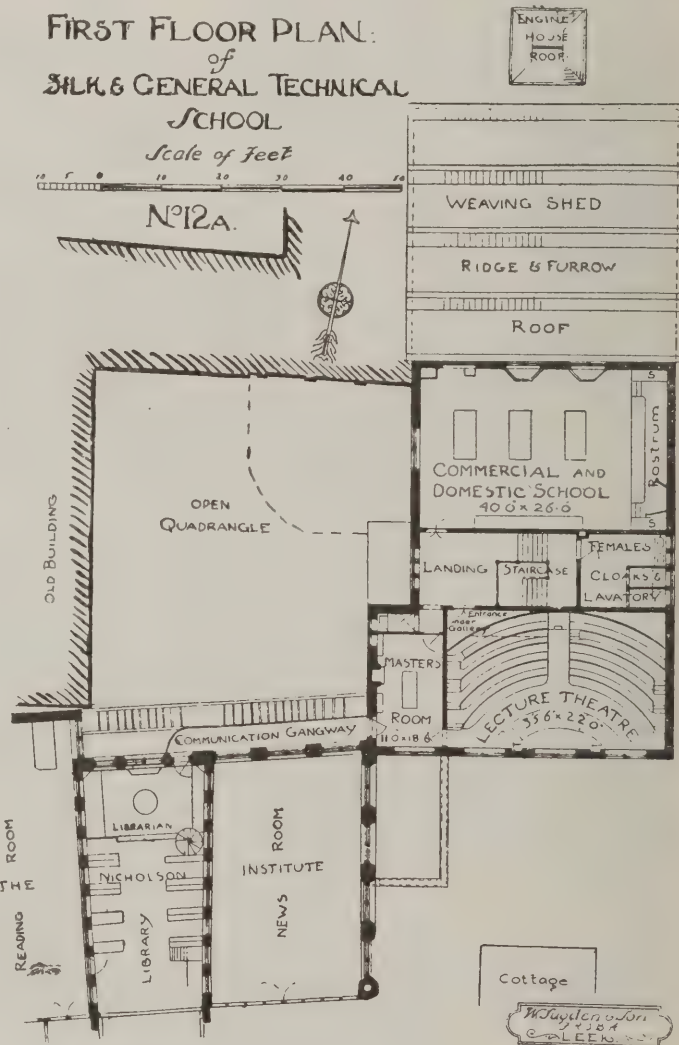
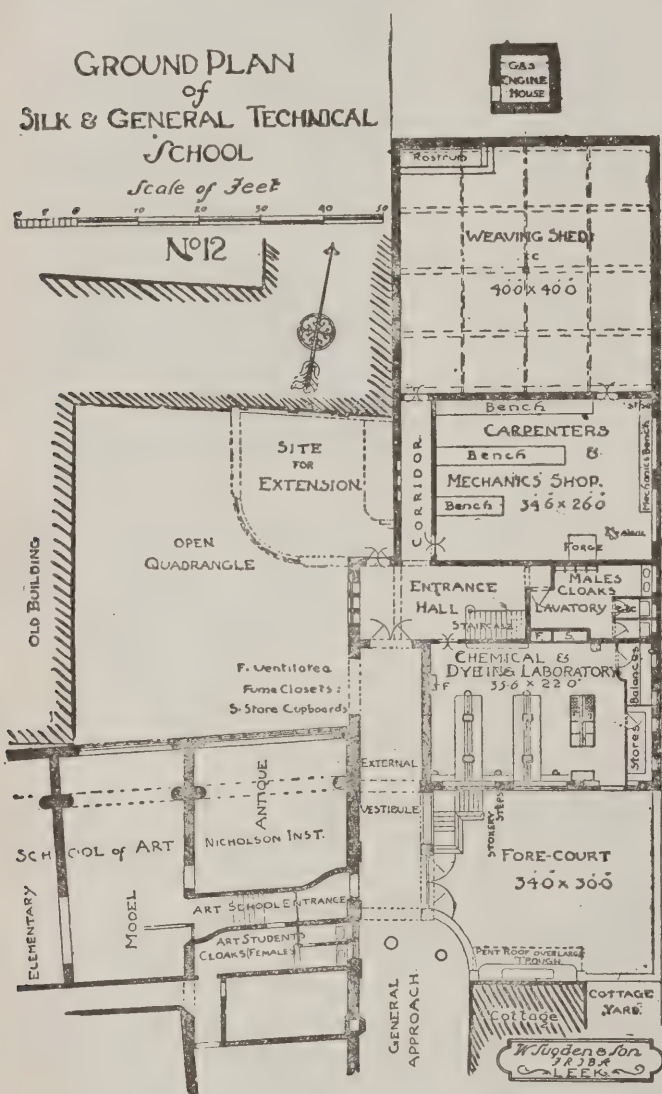
CONSIDERABLE efforts have of late been made with a view of giving silk manufacture in England the ascendancy it once possessed, and the Committee of the Leek Urban District Council deems it its duty to provide such means as lie within its power to further this effort. It is now endeavouring to establish a Silk School in the county. Plans and rough estimates for the erection and fitting up of such a School have been prepared by Messrs. W. Sugden and Son, of Leek. The position of the new building, say the Architects, has been determined by the necessity of having it as contiguous as possible to the existing School of Art, and the other popular educational provisions of the existing Institute, with a careful avoidance of damaging the light

8 ft. by 8 ft.; site for extra class room when found indispensable, 25 ft. by 22 ft. On the first floor: Master's room, 11 ft. by 18½ ft., with gangway of communication to the principal's room in the Nicholson Institute Library; commercial and domestic school, 40 ft. by 26 ft., for practical and theoretical instruction in book-keeping, commercial correspondence, French, Latin, shorthand, &c., and in hygiene, sick nursing, ambulance work, domestic economy, dressmaking, millinery, cooking, laundry work, &c.; science lecture theatre (with store room), 35½ ft. by 22 ft., for teaching in theoretical organic and inorganic chemistry, theoretical and applied mechanics, mathematics, electricity and magnetism, physiology, botany, natural history of silk, &c. The building will be of substantial but economical construction: brick built and tiled exteriorly as the adjoining Nicholson Institute, windows of wood painted white and glazed with crown glass, floors of concrete or asphalt (except to

aspect. A rough estimate of the cost of the School has been made as follows: £2,500 for building purposes; fittings, £500; freehold land, £250; total cost, £3,250.

MOORISH STUCCO.

MOORISH stucco appears to be harder, closer in texture, tougher, and much less absorbent than gypsum or plaster of Paris when set in the usual manner. Lime alone, as ordinarily slacked, would not give any such texture, even if it could be manipulated into similar ornamental forms. Moorish stucco is almost, if not quite, identical with Indian "Chunam"—a substance produced much in the same way as the fine stucco of the Romans. In the native treatment of all these substances four things have to be generally observed:—Firstly, to employ the finest lime only; secondly, to mix it with



and air of the present structure. Consequently the new building has been set back so as to leave a sufficient fore-court (which will be utilised) between it and the adjacent cottages, which are only of low height. The accommodation comprises—On the ground floor: External vestibule, entrance and staircase, &c. weaving shed, 40 ft. by 40 ft. for theoretical and practical instruction in silk weaving and manufacture, pattern analysis, card-cutting, drawing and designing, loom construction and manipulation, machine construction and drawing, history of textile fabrics and designs; mechanics' and joiners' shop, 34½ ft. by 26 ft., for manual instruction in wood and iron and for study of building construction; chemical and dyeing laboratory, 35½ ft. by 22 ft., including balance room and chemical stores or preparation room for studying and practice in organic and inorganic chemistry and silk dyeing; open fore-court to last, 30 ft. by 34 ft., for certain dyeing processes; gas-engine room,

the master's room, which, with the lecture theatre gallery will be of wood; and the entrances and corridors which will be red quarries; and the staircases which will be of stone). The heating will be by low pressure hot water, the boiler placed in an extension of the existing stoking to which an external access from the fore-court is provided. For ventilation, fresh air will be admitted behind the hot-water pipes or coils and sufficient extract provided, aided probably by a Blackman fan driven from the shafting. The fanlights of all windows will also open wide for summer or emergency ventilation. For the drainage a rapid fall to the North is secured by the natural declivity of the site and the land between it and the public sewer. The drainage, of course, will be on the most approved principles, thoroughly disconnected, laid in concrete, on straight lines from manhole to manhole, with inspection chambers, lamp-holes, &c., as necessary. The greater part of the lighting is by windows of North

pounded earthenware; thirdly, to beat it thoroughly; fourthly, to use saccharine substances to retard the setting and keep the mass plastic under the tool.

ON Sunday week the new Choir of Bristol Cathedral was opened, on the completion of that section of the work of restoration of which it formed part.

A MEMORIAL Cross of a Celtic type, about 12 ft. high, has been executed in Scotland, and sent to Chicago for erection at the grave of the late John W. Root, the Architect.

THE excavations conducted by the American Institute on the site of the ancient Temple of Hera at Argos, have now been completed. Two fine marble heads of Amazons from the metope of the Temple have been discovered. Professor Waldstein, the director of the excavations, will start for England in the course of the present week.

BUTTRESSES.

IT need hardly be remarked that Buttresses are necessary supports to a lofty wall. A wall of three feet in thickness, with Buttresses projecting three feet more at intervals, is much stronger than a wall of six feet thick without Buttresses. A long unbroken mass of buildings without light and shade is monotonous and unsightly; it is evident, therefore, that both for strength and beauty, breaks or projections are necessary in Architecture. We will examine in which style, Christian or Pagan, these have been most successfully carried out. Pointed Architecture does not conceal her construction, but beautifies it. Classic Architecture seeks to conceal instead of decorating it, and therefore has resorted to the use of engaged columns as breaks for strength and effect—nothing can be worse. A column is an architectural member which should only be employed when a superincumbent weight is required to be sustained without the obstruction of a solid wall; but the moment a wall is built, the necessity and propriety of columns cease, and engaged columns always produce the effect of having once been detached, and the intermediate spaces blocked up afterwards. A Buttress in Pointed Architecture at once shows its purpose and diminishes naturally as it rises and has less to resist. An engaged column, on the contrary, is overhung by a cornice. A Buttress can be made to project such a distance as to produce a fine effect of light and shade. An engaged column can never project far on account of the cornice, and all the other members necessarily according with the diameter of the column, would be increased beyond all proportion. Flying Buttresses, those bold arches by which the lateral thrust of the Nave groining is thrown over the Aisles and transferred to the massive lower Buttresses, again demonstrate the true principles of Christian Architecture, by the conversion of an essential support of the building into a light and elegant decoration. Who can stand among the airy arches of Amiens, Cologne, Chartres, Beauvais, or Westminster, and not be filled with admiration at the mechanical skill and beautiful combination of form united in their construction? Are the revived Pagan buildings constructed with such superior skill as to dispense with these supports? By no means; the vaults of St. Paul's, mere coffered semi-arches, without ribs or intersections, have their Flying Buttresses; but as this style of architecture does not admit of the great principle of decorating utility, these Buttresses, instead of being made ornamental, are concealed by an enormous screen, going entirely round the building.

ART APPRECIATION IN SHEFFIELD.

TWENTY-FIVE PER CENT. MORE THAN LONDON PRICES.

THE sale of the late Mr. Turner's fine collection of pictures, was undoubtedly the most important in point of quality held in the Sheffield District since 1868. Then a choice collection of Art treasures belonging to a local man, was dispersed, including Linnell's famous "Sheepfold." The sale last week attracted crowds of buyers—private individuals as well as dealers—from various parts of the country. The total sum realised was just over £15,000, and it is satisfactory to note that Sheffield purchasers held their own, many of the best works passing into the hands of local Art lovers. The sale lost nothing by being held in Sheffield, instead of being transferred to the Metropolis, and more than one London dealer took occasion to compliment the auctioneer not only upon the ability with which the sale had been conducted, but also upon the excellence of the prices realised. After the first day's results, a leading London dealer wrote to Mr. W. M. Edon, "Allow me to congratulate you upon the very able manner in which you conducted the sale and achieved a success unparalleled, I believe, in Yorkshire. All London dealers will agree with me in saying that at —'s (mentioning a well-known Metropolitan Art Mart) the pictures would not have fetched as much by at least 25 per cent." Of course there was a considerable "drop" in some of the larger works—perhaps there never was a period when people had less "picture-money" to spare—but taking the collection as a whole, it realised two-thirds of the amount it

cost the owner. If one recalls the sacrifices which were made when the Murietta and other collections came into the market after the Baring smash, the shrinkage in the Sheffield sale was comparatively slight. In one respect the Turner Collection was particularly noteworthy—the rarity of examples of the foreign Schools. The Flemish, Dutch, and Italian Masters were almost entirely absent, whilst anything in the nature of an "Old Master" seems to have been altogether avoided by the collector. In place of the monstrosities too often seen in large collections, he had drawn together a number of stirring modern canvases, painted by men the majority of whom still live, are popular, and who paint to please, choosing their subjects for the most part from Nature herself, and eschewing those forbidding mediæval scenes which people, as a rule, only affect to like. Prominent among such is T. Sidney Cooper, the veteran landscape painter, now in his goth year, the dates of his works ranging from 1834 down almost to the present time. David Cox, most charming etcher, as well as painter, John Linnell, T. Creswick, B. W. Leader, whose popularity increases year by year, and Vicat Cole, all appeal to the restful side of Nature, whilst the more stirring Schools were well represented by Ernest Crofts, with his martial scenes of the Netherlands, and R. Hillingford and Beavis.

MECHANICS AND THE STABILITY OF STRUCTURES.

THE different styles of Architecture may, to a certain extent, be distinguished and classed according to the kind and the greater or less complexity of the principles which regulate the stability of the structure. The simplest kind of stability is that of a single mass resting on a base. This is exemplified by pyramids, obelisks, and solitary pillars. Next in point of simplicity is the stability of a load resting on a lintel whose two ends are supported by pillars, each of sufficient dimensions to be stable in itself. This we find exemplified in Egyptian and Greek Architecture, and in those examples of Roman Architecture from which the arch and dome are absent. The next degree of complexity consists in supporting the load on each pier of which the structure consists, by a pair of pressures inclined to each other—that is, by introducing the arch and dome—and this we see in later examples of Roman and Italian Architecture, and in various styles of the earlier middle ages, such as the Byzantine, the Lombard and the Anglo-Norman. The perfecting and extending the application of the arch, so as to sustain the entire load of the higher parts of the structure by means of the thrust exerted through ribs, suitably formed and arranged, characterises Gothic Architecture. The balancing of overhanging leads is seen to a certain extent in the beeting bartizans and turrets which form the most picturesque feature of the Scottish Baronial style. The balancing of bulky arches upon comparatively slender pillars, whose lateral stability depends very much on their connection with the mass above them, is characteristic of Saracenic Architecture. The styles of framework in roofs, and in buildings of wood and iron, might be classed in a similar manner according to the way in which the principles of statics regulate the stability of the structures. Another mechanical characteristic of styles in Architecture is the way in which the strength of the materials is exerted. In the obelisk, pyramid, and simple tower or column, resistance to crushing is also brought into play, and the same is the case with the most elaborate combinations of ribs, groined arches, and tracery in Gothic Architecture. In the styles which employ architraves supported by pillars, the transverse strength of lintels or beams is also employed. The support of overhanging loads requires the transverse strength of corbels and cantilevers, and in some cases the tenacity of cement and cramps. Timber and iron framework bring every form of strength into requisition. A subordinate distinction of styles, founded also on mechanical principles, depends on the hardness and durability of the material of the building. For example, a certain plainness of style, which, if executed in granite, constitutes majestic simplicity, appears poor and bare in sandstone, and paltry in brick.

ARCHITECTURE IN ITALIAN PAINTING.

RAPHAEL was one of the Italian Masters who had most recourse to Architecture for the embellishment of his pictures, and although he did not always avoid the inconsistencies and anachronisms which contemporary artists were apt to commit, he showed an attention to circumstantial facts and particulars which very few equalled. One of the earliest and most beautiful, known as the "Marriage of the Virgin Mary," now in the Gallery of Milan, is adorned by an elegant building of sixteen sides with Ionic columns, probably intended for a synagogue, but not having anything Eastern in its style. Its appearance has, however, nothing offensive, but affords a pleasing accessory to this beautiful subject. In his painting of Paul and Barnabas at Lystra, this great artist has shown the same attention to circumstantial details, and with the happiest results, for amongst the statues which decorate noble edifices, the statue of Mercury appears conspicuous, reminding the observer, at once, that the inhabitants believed St. Paul himself to be that god, and that they were about to offer sacrifice to him as such. St. Paul preaching at Athens likewise affords a successful proof of how much Raphael enhanced the beauty of his historical pictures by means of tasteful architectural buildings of which the Classic orders, clearly defined, are perfectly and appropriately characteristic. In the cartoon representing St. Peter and St. John healing the lame man at the Gate of the Temple which was called "Beautiful," he has introduced a number of spiral columns, richly and elaborately decorated, by which means he has marked impressively the characteristic splendour of the porch. But in this instance his attention to particulars does not appear to have been equally successful, for the effect is meretricious and detracts from the solemnity of the subject. A simpler style of Architecture, though perhaps less truthful, might have been better suited to the dignity of the composition. Neither Michael Angelo nor Leonardo da Vinci, although the first was an Architect and the second an Engineer, seem to have resorted much to Architecture for the embellishment of their pictures. Nor did Correggio, who at Parma contributed so much by his frescoes to embellish the Duomo, avail himself of the beauties of Architecture to enrich his most graceful subjects. The Venetian School of Painting, however, borrowed a great deal from the sister Art, and in this we may probably mark the influence of the architectural magnificence of the City. Gentile Bellini was one of the earliest masters who painted architectural subjects, and during his residence at Constantinople he executed a large, and at the same time elaborate and highly finished, picture of the Church at Santa Sophia, which is now in the Gallery at Milan. Another picture of the Venetian School, very remarkable for its architectural interest, represents what was termed the "Miracle of the Ring," so famous in the Venetian annals. It was painted by Paris Bordone, and the background represents the beautiful and highly decorative Architecture of the Palazzo almost as it now stands. But the artist of this School who gave the greatest importance to architectural ornament in his pictures was Paul Veronese. By his introduction of architectural monuments on a large scale he imparted great beauty and originality to his pictures. He often gave perspective depth and greatness to his compositions by representing these edifices at various distances. Further, by placing them on the most diversified situations he added in a remarkable degree to their picturesque quality. These architectural arrangements afforded him the means of diversifying the positions and attitudes of his figures, which he represented alternately ascending flights of steps, leaning over elevated balconies, or climbing up buildings in order to overlook the principal scene of action.

DR. RICHARD MUTHER, the author of the "History of Modern Painting," which Messrs. Henry & Co. are now publishing, has resigned his post as Keeper of the Prints at the Munich Pinakothek to take up the appointment of Professor of Art History at the Royal University of Breslau.

SAWDUST.

THE Okehampton Board of Guardians intend to alter the workhouse, at a cost of about £3,400.

FOR the extension of Canton Parish Church Cardiff, a committee has been appointed to raise about £2,500.

THE magnificent new buildings of the Imperial Baths at Karlsbad were opened with great ceremony on Sunday last.

THE Barry Urban District Council has received the sanction of the Local Government Board to borrowing £6,000, for the purpose of building an Infectious Diseases Hospital for the district.

A DESTRUCTIVE fire occurred on Tuesday last in the suburb of Psamatia, Constantinople. One hundred and seventy-eight houses and five shops were destroyed. The majority of the occupiers were Armenians or Greeks of the poorer class.

It is suggested in connection with the scheme for a County Museum for Lincolnshire, that the Old Hall, Gainsborough, would be a most suitable site. It is an ancient Baronial Hall of considerable architectural beauty and extent. Its historical associations befit it for the purpose to which it is now proposed that it should be devoted, there being a legend that the marriage of Alfred the Great took place within its walls, and that it was on the banks of the Trent that Canute was persuaded by his obsequious courtiers to defy the rising tide, and that Sweyn, the Danish King, died there. In later days it was associated with the Civil War, and many relics have been dug up in the neighbourhood.

It has been decided that in the year 1896, there shall be held in the Exhibition Park in Berlin, an International Fine Art Exhibition, to celebrate the 200th year of the establishment of the Royal Academy of Arts.

ON Tuesday last, the Bishop of St. Asaph consecrated the newly erected Church of St. David's, Denbigh. The edifice was erected by Mr. Samuels, of Wrexham, from designs by Mr. Lloyd Williams, architect, Denbigh. It is of the Early English style of architecture, and cost £4,000, independent of the Chancel given by the late Dr. Turnour, which cost £1,500. Seating accommodation is provided for 700 worshippers. The Reredos was erected by Earp and Hobbs, of London.

BARON HENRY DE WORMS, M.P., has purchased the estate known as Abbadon Place, which joins the properties recently bought by him in the immediate vicinity of Henley Park. He has also purchased several houses and a considerable amount of land in and about the village of Pirbright, where he intends constructing model cottages, as the want of suitable accommodation for the working classes has long been felt in the neighbourhood of his residence.

THE Hospital Committee of the Aberdeen Town Council propose to erect dwelling-house accommodation in the hospital ground for the firemen and sanitary inspectors, and their families. The Song School Buildings are to be reconstructed.

MUCH of the difficulty that at one time surrounded the proposed reconstruction and improvement of the Lower Walk, a popular promenade at Blackpool, which has been almost destroyed by the incursions of the sea, has now been removed. It has been agreed that the Corporation should take over the whole of the Park, for entrance to which the Land Company is empowered to collect toll, for the sum of £5,000. The Borough Surveyor is at present engaged upon a plan for the reconstruction of the walks, the design showing a series of promenades with shelters.

At a meeting of the King's Norton Board of Guardians, held on Wednesday last, resolutions were passed consenting to the erection and fitting up of the new Infirmary on land already purchased, in accordance with plans approved by the Local Government Board. It was also decided that the expenditure on the building should not exceed £21,000, and that £3,000 should not be exceeded in the fitting and furnishing of the Infirmary. It was agreed to borrow the required sum upon the security of the common fund of the Union.

THE Throne to be erected in Norwich Cathedral in memory of the late Bishop Pelham has been completed, and the work of placing it in position has been commenced.

It is proposed to erect a new Vestry and Organ Chamber, &c., at Holy Trinity Church, Bickerstaffe, at a cost of about £800, which it is expected will be defrayed by voluntary subscription, and at the same time extensive repairs are to be made on the Church.

THE Talcen Mawr, a famous pillar of bastard greenstone in Penrhyn Quarries, Bethesda, weighing 125,000 tons and 360 ft. in height above the lower gallery of the quarry, was recently demolished, in presence of a large number of spectators, by the simultaneous firing of two charges of blasting-powder, amounting altogether to seven tons. The operations for removing the rock have been in progress since September last, under the direction of Mr. E. A. Young, chief manager of the quarries.

THE Bishop Pelham Memorial Throne, which is being erected in Norwich Cathedral, from the designs of Mr. John L. Pearson, R.A., will, it is expected, be ready for dedication by Whit Sunday. The late prelate presided over the See for nearly forty years, and it is mainly to the efforts of Dean Lefroy, who succeeded Dr. Goulburn, that his memory is being so fittingly honoured.

AN Art Union is to be established in connection with the Earl's Court Exhibition. It is proposed to expend 15 per cent. of the amount paid for season tickets in the purchase of works of Art. The lottery will be confined to holders of season tickets.

THE fund necessary for the purchase of the House in which Carlyle lived in Chelsea has not been fully forthcoming. The Committee has, however, resolved to complete the purchase of the residence, hoping in time to clear off the small debt from the fees paid for admission.

THE Government has yielded to pressure on the subject of the naval works at Dover and Hong Kong. The sum of £10,000 is to be spent at each, and to allow for this expenditure, the sum originally assigned to Chatham is to be reduced by £22,000, the odd £2,000 going to swell the item for charges of superintendence.

AMONGST other exhibits of a well-known collector which are being shown at the Goupil Gallery is a delightful case of Tanagra figurines, which were some of the first to be discovered and to come to this country. There are some fifty of them, and they are valued at some £10,000.

THE memorial-stones of a new Primitive Methodist Chapel at Bloxwich were laid last week. The site is in High Street, near the tram-line terminus, and the building is to be in the Classic style, the design being worked out in terra-cotta and red brick, and the internal arrangements including a Gallery, prayer Meeting Room, Vestry, and Organ Loft, with seating for 600 worshippers. The cost is estimated at £1,915. The work is being carried out by Mr. W. Hopkins, Thorp Street, Birmingham, from designs supplied by Mr. S. Loxton.

PLANS for the conversion of the Queen's Hall, Reading, into a Theatre, are being prepared by Mr. C. J. Phipps, F.S.A. Sitting accommodation will be provided for 1,700 persons.

THE Conservative Club recently erected at Belle Vue, Wakefield, was opened on Monday week. The building, which is of corrugated iron, lined with wood, has been erected near the Doncaster Road on a site secured from Colonel Charlesworth, M.P., the president of the Club, and has cost about £400.

THE Rev. Dr. Jayne, Bishop of Chester, recently consecrated the new Church of All Saints, recently erected at Micklehurst, on the Cheshire side of the Borough of Mossley. The new building is a very handsome structure and is built of stone, and has cost about £4,000.

A PROLONGED struggle is feared in the Leeds Building Trade. At a meeting of the Masters on Thursday, the determination was expressed not to yield to the men's demands. The officials of the men's Union maintain that they can continue the strike for six months if necessary, and give each man 15s. a week during the whole of that time.

It is proposed to celebrate the jubilee of Islington Presbyterian Church by the erection of a new Organ and the substitution of a Platform for the present Pulpit.

FOR the new Board School, to be erected on the Marsh, Lancaster, it has been decided that Architects within the borough be invited to send in competitive designs.

THE Tender of Mr. Walter Scott, of Newcastle, for £113,311, has been accepted for additions to Newcastle City Asylum, Coxlodge. Plans are by Mr. J. W. Dyson, architect, of Newcastle.

THE School Board of Stranraer, N.B., are about to make additions to "The Academy," at a cost of over £2,000. Mr. J. C. Macfarlane, of Stranraer, is the architect.

THE late Mr. Charles Docker, of the Deanery, Brewood, has bequeathed £1,000 to the Vicar and Churchwardens of Brewood, to be applied to the purpose of placing a new peal of eight bells in the Tower of the Parish Church.

A LONG cherished scheme for providing the residents of Marton, a working class suburb of Blackpool, with premises in which rational recreation will be afforded, was further advanced on Saturday afternoon, when the foundation stone of a new building, which is to be known as the Marton Working Men's Institute, was laid by Mr. J. Parrott, South Shore. The plans for the building have been prepared by Mr. Frank H. Gorst.

ADDITIONS have just been made to the Altar at St. Michael's and All Angels' Church, Exeter, all being in oak, consisting of Tabernacle, Gradine, and a large Cross 6 ft. high, having upon it the *tilli*, with the initial letters I.N.R.I. The Cross rests upon the Tabernacle, which is carved, and its door diapered and gilded. There are two super Altars, their risers being carved with flowing tracery. The additions have been carried out by Messrs. Harry Hems & Sons, of Exeter, who also made the carved oak Pulpit, from designs of Sir Arthur W. Blomfield, A.R.A.

THE new School to be erected at Hea Moor, will be built at the east, or upper end, of the Chapel, on a plot of ground 30 feet square, belonging to the Trustees, which the architect, Mr. J. W. Trounson, F.R.I.B.A., has admirably adapted for the purpose needed, in spite of great difficulties as to shape and position of ground, &c. The room will be entered by means of a tiled Lobby, 8 feet long by 5 feet wide, and the Lobby will be screened round. The interior of the room will be made as ornamental as is possible consistent with usefulness. It will be dadoed round to a height of 4 feet, and the ceiling will be lined with pitch-pine boards, 6½ inches wide and V-jointed which, when stained and varnished, will present a very pleasant and comfortable appearance. There will be three large windows—8 feet by 4 feet 6 inches—each containing two panes of white shelled-glass. The contract for the building has been secured by Mr. W. H. Trounson, for £217 1s. 9d. (the highest of the eight tenders sent in being £249 10s.).

SOCIETY MEETINGS.

Durham and Northumberland Archaeological Society.—The annual meeting of the Durham and Northumberland Archaeological and Architectural Society was held last week, in Bishop Cosin's Library, Durham. The Rev. Canon Greenwell, D.D., presided, and there was a large attendance of members. The president was unanimously re-elected. Among the new members elected was the Dean of Durham (Dr. Kitchin). The financial statement showed that the balance in the bank had increased from £113 18s. 8d. to £198 5s. 6d. The president referred to the recent discoveries made in Durham Cathedral by means of which the remains of St. Carileph's Church had been discovered. The discoveries were purely accidental. He suggested, as these discoveries were of a very important character, that they should devote a special day to go fully into the matter. He himself would undertake to give the necessary description. The suggestion met with hearty approval, and the 9th of May was fixed for the special day in the Cathedral. Other meetings were arranged for the summer.

THE BUILDING TRADES' EXHIBITS AT THE HEALTH EXHIBITION, MANCHESTER.

NOBODY considers exhibitions produced under private commercial enterprise to be anything else but a mere money-making or a money losing concern, generally without backbone, and lacking in almost every essential detail that goes to make such things sincere and genuine. This International Health Exhibition at Manchester is no exception to the rule. With the exception of about a dozen exhibits, which we intend to comment upon below, the whole thing is as little allied to health teaching or culture, as it was possible to make it. Given a certain number of firms willing to pay a certain number of pounds sterling for a few superficial feet of space, plenty of cheap drink, "tripe and onions, sixpence after six o'clock," a few good and expensive bands, and a poor, miserable fairy fountain, which has been boomed over the whole town, and the thing is complete, except for the hundreds of pounds profit accruing to the enterprising promoter, for three weeks' work. Mr. A. P. Baker, the promoter of the concern, is a genial native showman, who, since he has discovered the financial possibilities of exhibitions, has withdrawn much of his attention from a local Decorative Art Studio, where, to give him just credit, he manufactures the strongest and finest bamboo work we have seen. But in the matter of exhibitions, Mr. Baker is wiser than we are. He knows human nature better than we do. He knows the value of that fairy fountain and Dan Godfrey's band, and, forsooth, they both lead up to that "tripe and onions after six." To see the Harrietts of Manchester pouring into the St. James's Hall, in their thousands, on Saturday nights, would have made Mr. Greville Montgomery green with envy; but sanitary science was not their ambition. We forget for the moment the constitution of the exhibition; forgot also the hour we sat, with profit, listening to Sir Benjamin Richardson discourse most wisely upon domestic sanitation to about a dozen persons huddled together in a dreary, dirty hall, protecting each other from the draughts.

William Ingham & Sons,

Branch of the Leeds Fire Clay Company, Wortley, Leeds, have the first exhibit principally of Hassall's pipes. These pipes at the present hold the market, in face of the fact that engineers have agreed that a cement joint is not a good joint. The makers should never forget to instruct their customers in the proper mixing of their cement. We have seen these pipes laid bare with every socket "blown," owing to neat cement having been used. The proportion should not be less than one of cement to four of washed sand.

Messrs. Odams

show samples of their disinfectants. The World is acquainted with Odams' Chemical Manures, and the Company is worthy of being patronised for its disinfectants. The disinfectant Sawdust which it prepares is a splendid notion.

Messrs. Lightbown, Aspinall & Co.

have in a very modest exhibit a specimen of their Silk Flock wall paper, which they will do well to introduce to the London Market. We are greatly mistaken in our estimate of this, if this very charming specimen of wall hanging does not take the town by storm. The price is high but distinctly cheap.

The Bucket Fire Extinguishers, by

Messer & Thorpe,

of Quality Court, Chancery Lane, London, are still the best in the Market, and highly ingenious. We should like to see the container contracted at the top, so that only an opening large enough to withdraw the buckets was exposed.

The Simplex Window Fittings Co.,

of Caroline Street, Birmingham, exhibit their window in work, and a local architect has pointed out to us the great advantage this system has—the system of one sash-balancing the other—in large institutions where window openings are generally high, and were the sills are some distance from the floor levels. In bedrooms also, where windows are somewhat always inaccessible, the Simplex is a boon.

Lomnitz & Ducksbury,

of 44, Blackfriars Street, Manchester, have a working model of Garners' Patent Hoist, an arrangement whereby the lift doors are opened automatically by the lift itself rising or falling, so that there is no possibility of lift doors being left unlocked and accidents happening.

John Heywood

shows a mixed collection of desks, perambulators, educational literature, lamps, and Art pottery.

The N. A. P. Company

show their top Suspension Safety Cleaning Windows, their Fenestra Ventilator, which is a method of using the pulley boxing of an ordinary window frame as a vent flue, and admitting air into the room through the pulley stiles; an ingenious and scientific arrangement. But, again, we remark upon the value of this firm's wonderful casement possessing the advantage of opening inwards or outwards and being absolutely weather proof.

The Safety Tread Syndicate

exhibit their Unwearable Non-Slipping Stair Tread. Why they call it unwearable we do not know. There is no flooring or paving material in existence that can claim such a virtue. But Mason's system appears to us to be the best in the market, at any rate, of metal ones.

The Sanitary Bath Company

show several of their Baths, manufactured of Siemen-Martins heavy sheet steel, lined with polished copper. The Baths are mounted on ornamental feet, and have no casing of any kind, which is a distinct advantage and qualifies the name conferred upon them. We are informed that the weight of these beautiful looking baths is only 200 pounds.

Thomas Elliott & Sons,

of 26, Pall Mall, Manchester, exhibit a working model of the Temperley Transporter, the special feature of which is a Pulley Carriage or Traveller, of novel design, working on an elevated track, and provided with a simple automatic device by which the traveller is arrested and held stationary whilst a load is being lifted or lowered, and which sustains the load whilst the traveller is moving, all the operations being effected by means of one working rope. The little thing is so clever that we purpose illustrating the methods of its use. Messrs. Elliott, being agents for the "Opalite" manufactures, shows also specimen of this material applied to bricks and the lining of walls. We have already expressed our opinion of Opalite when it was first exhibited at the Building Trades' Exhibition at the Agricultural Hall.

The Self-Lock Roofing Tile Co.

have erected one of their model buildings showing their tiles, and their manufacture in actual operation. We notice in the catalogue that a guarantee is offered, that a roof constructed in accordance with the instructions of the Company shall be both rain and storm proof, and an assertion that the cost of these self-locking tiles is about one-third of any other roofing material now in use. This is a very strong factor in their favour, and should procure for them a large sale for schools, warehouses, factories, farm-houses, and such erections.

The Cork Pavement Co.,

which exhibit their paving bricks on this stall, possess a material with distinct advantages for many certain uses. Nothing could be better than the Cork pavement for railway stations, horse repositories, stabling, tennis courts, and such places where a noiseless paving is necessary. It is necessary to mention that the bricks consist of a bituminous material mixed with particles of cork, procuring a softness of head and preventing slipping.

Mooney & Co.,

of Manchester, have a stand of spray and shower baths, Litz baths and bidets, folding lavatories and patent closets, all of which are beautifully manufactured by Messrs. Morrison & Ingram. Mr. Mooney is a plumber of much repute in Manchester, and we can emphasise repute by saying we have not witnessed better specimens of the art of plumbing than he has.

shown us here. The Portable Spray and Shower Bath is a marvel of completeness and perfection.

The Natural Purification Co.

show a working model of Cosham's Patent Precipitating Tank which interests us deeply. We are asking Mr. Cosham to submit us drawings of his arrangement, when we will gladly give a full description of the invention, backed by an expert opinion of some value.

Messrs. Shanks & Co.,

of Deansgate and Barr Head, Glasgow, have a fine show of sanitary goods, consisting of the "Tubal" School Lavatories, a "Fin de Siecle" Bath, whatever that may mean, most wonderfully enamelled in imitation of marble, the "Lever" Syphonic Closet, the Unity Cistern, and other manufactures.

Henry Lightfoot,

the agent for Messrs. Shanks, has on an adjoining stall some remarkable specimens of lead pipe work, including examples of working single and double lead bends from solid lead pipes.

J. Duckett & Son,

the Burnley manufacturers of sanitary ware, have the advantage of being represented by a thoroughly practical and business man in Mr. Debney, who, we understand, is responsible for those clever detail drawings of their manufactures which have already warranted our highest praise. The question of Slop Water Closets is of the most vital importance in the North, and we have therefore sought Mr. Debney's aid in thoroughly investigating his exhibits. These include Automatic Tipplers, varying from 3 to 100 gallons capacity for flushing closets, drains and sewers. A very good form of overhead tilting tank for flushing latrines and urinals with fresh water, the form of which suggests a powerful flush with a comparatively small quantity of water. Two forms of Slop Water Closets are supplied with water to shew their use. The one called arrangement B appears to us very good and undoubtedly the best; in this arrangement that part of the closet which receives and retains the soil until removed by the slop water is effectually flushed every time the tipper discharges. Such is not the case with arrangement D, and it is an obvious necessity that that part of the closet needs flushing most. The arrangement B is so constructed that the three-gallon tipper which receives the slop water is out of the way of the closet soil and cannot be fouled to prevent working. The tipper is contained at one end of a glazed earthenware box, while at the other end a receptacle for the soil is formed to retain a little water after every flush to prevent sticking. When the tipper discharges in this closet upon the soil receptacle the flush is so powerful that it effectually removes all soil that may be floating in the small quantity of water resting in the bottom. The trap underneath is made to turn in any direction to meet the line of drain. The arrangement D has the tipper under the seat and is the receptacle for soil and slop water alike; the only part of this closet which appears to us to be well flushed is the trap underneath. The pedestal is fitted with an inlet for rain water from closet roof to flush the back. This appears a good thing, because every form of waste water closet is liable in some degree to become fouled above the inlet from drain. A very good arrangement is fitted to this closet in the form of a combined axle and buffer made in gun-metal; hitherto most closets have been fitted with an India-rubber buffer stop, but it is claimed that the new contrivance will last longer. A unique introduction of plate glass in the front part of the tipper will prevent considerable fouling of this vessel.

The Sanitation Improvement Co.

shows Day's Patent Stafford Closet, the only objection to which we refer being the fact that the tipper is under the seat and receives the soil. This is undoubtedly an objectionable system which prevents his slop closet obtaining premier honours.

The Albion Clay Co.,

of the Albion Works, Woodville, Burton-on-Trent, again show their fine Granitic Stoneware manufactures. The Paragon pipe—than which there is no better made in this country; Sykes Patent joint, which we consider to be the finest

on the market; and Sykes' Patent Interceptor, which is the very acme of sanitary scientific investigation, Sykes' Disconnecting Slipper, serving as gully and slipper combined, meets all requirements as no other slipper does, it prevents splashing and is perfect as a gully. Our readers are so well acquainted with our opinion of the Albion Clay Company's goods, that we cannot do better than remark that Mr. Bird, their exhibition representative, who is responsible for all the working drawings and illustrations appearing in their catalogues, is proficient in sanitary science, and that he, or Mr. Sykes, the engineer himself, willingly place their experience at the disposal of architects and surveyors wishing to consult them.

The Builders' Journal COMPETITIONS.

No. 3.—Swimming Baths.

Designs for Swimming Baths in a country town of 5,000 inhabitants. To contain cold water bath fifty feet long, three feet to six feet deep, with necessary dressing boxes; six private washing baths for gentlemen and three for ladies; necessary heating and ventilating appliances to be provided, together with waiting and caretaker's rooms, the entire cost not to exceed £3,000. The site is 100 feet deep and of any necessary frontage, but entrance can only be obtained from the front. All designs to be delivered on or before Monday, the 10th day of June

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eightpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

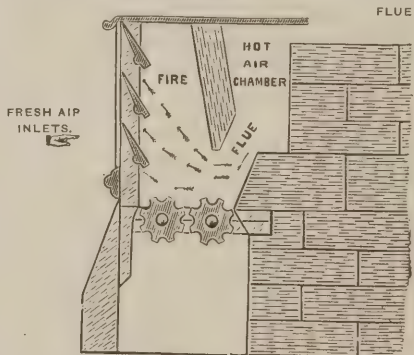
Talbot House, Arundel Street,
Strand, W.C.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in THE BUILDERS' JOURNAL, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would in particular, desire to call our attention.

The Economic Smokeless Fire Co., Limited.—We have before us a catalogue of the kitchen-ranges, stoves, &c., of the Economic Smokeless Fire Co., Limited, of Shaftesbury Avenue, and have paid a visit to their show-rooms, and had their system explained to us. It is claimed that these patent fires practically consume their own smoke, and that the process of combustion is accompanied by the production of intense heat. The best results are obtained by feeding the fire with common slack and coal dust, such as is sold in London at 10s. 6d. per ton, and by its use the saving in cost of fuel alone is from 50 to 70 per cent. The flue or chimney, instead of commencing at the top of the fire, is connected at the bottom of the grate, and made to form a hot air chamber at the back of the fire, into which the smoke, or what would be smoke, and flames are drawn, so that the smoke having to pass through the fire instead of being carried direct up the flue in the ordinary way, is super heated; takes the form of gas, which, passing onward



Section of Fire.

into the hot chamber, is consumed by the flames; the result is that instead of soot in the flues, we find nothing but a slight deposit of incombustible impurities, in the form of a grey powder. In the place of the ordinary bars in front of the fire, flat slips of iron, like a venetian blind are used, and these can be opened or closed to regulate the fire; they also take the place of dampers. The bottom of the fire-box consists of two grooved rollers, which turning inwards by a simple arrangement, serve both to stir the fire and remove the ashes. The only time that it is possible for the fire to smoke is when it is first lighted, and before the chamber at the back becomes heated. This was conclusively proved by a series of experiments made by the Manchester Corporation in September, 1892, a report of which we were shown. A range, cooking for 350 people, costs 3s. per day for fuel. We give a section of the fire which admirably shows the working of the system employed.

Flexible Hoses and Pipes.—We have lately had an opportunity of inspecting a variety of samples of flexible hoses and pipes manufactured at the Spincter Works, Emerson Street, London, S.E. To the uninitiated, there would not at first sight appear to be much scope for variety in the form and substance of such appliances. This is, however, a mistake. In addition to the familiar garden hose, of which thousands of lengths are sometimes

turned out in a single season, there are simply dozens of different makes of hoses, each one designed to meet some specific want. Thus we find ordinary delivery hoses, for conveying water, in all grades and sizes, whilst for suction and pumping purposes, an entirely different class is required—viz., an "armoured" or wired hose on the inside to resist the tendency of the "suction" to cause the hose to collapse and thus shut itself up. The conveyance of steam is another branch in which exceptional technical skill is required in the design of suitable hoses. We were shown hoses in this class of almost fabulous cost, the price running into pounds per yard. Such steam-pipes are of necessity only adopted by Government and other important concerns. Hoses are also specially designed for resisting enormous hydraulic pressures, as much as 4½ tons per square inch being reached in this class when necessary, the average being ½ ton working pressure, whilst to enumerate the special hoses—e.g., spirit, acid, brewers, oil, gas, vacuum, heating, air compressing, &c., would require a column of itself. We were specially interested in the various classes of fire hose and the accessory appliances, nozzles, branch pipes, sprayers, and couplings of this well-known pattern. We were shown handwoven canvas hose capable of withstanding very high pressures, whilst a large contract for leather hose was being carried out at the time of our visit. We were informed by Mr. Hamilton Church (who was formerly Works Manager to the National Telephone Co.) that the special feature of the Company's business was the supply of a "high grade" appliance. Their trade mark "Sphinx" is, we believe, an assurance of this.

Architectural Association Sketch Book.

To the Editor of "THE BUILDERS' JOURNAL."

DEAR SIR,—Will you kindly allow me to make it known to your readers that I, as secretary of the Sketch Book, have a few back volumes of the New Series still on hand, which I shall be glad to dispose of for the following reasons, i.e.: Having completed the New Series it is necessary to close the accounts, and in order to meet the last of our liabilities, we desire to realise the only asset we have, viz., some twenty copies in all of the last three or four volumes. I am glad to say that during the whole of the thirteen years over which the New Series has spread itself, we have always paid our way, but we cut matters so fine, that in order to settle our accounts, we must sell the whole of the volumes printed.

I think it is generally admitted that the volumes of the Sketch Book are about the best value for the money that can be obtained anywhere. I therefore trust that when it is known that the sale of the last few copies of the series will enable the Committee to send a final cheque to the printers, there are many who will feel disposed to lend a helping hand.

I should, perhaps, mention that each volume contains seventy-two plates, a title page and index, and is quite complete in itself. The price is one guinea, unbound, and we have copies of volumes 9, 10 and 12. I shall be glad to send copies on approval if desired, but as the whole series can be seen at the British and South Kensington Museums, the A. A. and the R. I. B. A., I trust that I may receive orders. —I am, yours faithfully, LEONARD STOKES.

3, Princes Street, Westminster, S.W.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BALDOCK.—For malting for Messrs. J. R. Page and Son, Messrs. Arthur Kinder and Son, architects, Suffolk House, Laurence Pountney-hill, Cannon-street, London, E.C. Quantities by Mr. Alexander H. Kinder, 23, Finsbury-circus, London, E.C. :—

Miskin	£5,142 0 0
Kidman	4,948 0 0
Jacklin and Co.	4,881 0 0
Warboys	4,698 0 0
Wallis and Sons, G. E.	4,594 0 0
Redhouse	4,492 0 0
Spencer	4,400 0 0
Foster, S.	4,305 0 0
Wall and Co., H.	4,249 0 0
Willmott and Sons	4,183 0 0
Foster, Matthew, Hitchin (accepted)	3,932 0 0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch PRESSED BRICKS

Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.

Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

BLANDFORD.—For malting and cellar for Messrs. Hall and Woodhouse. Messrs. Arthur Kinder and Son, architects, Suffolk House, Laurence Pountney-hill, Cannon-street, London, E.C. Quantities by Mr. Alexander H. Kinder, 23, Finsbury-circus, E.C.:—

Norman Bros. ...	£4,706	3	10
Chinchin, W. J. ...	5,580	0	0
Clarke and Co. ...	4,072	0	0
Jenkins and Sons ...	3,784	0	0
Green, A. H. ...	3,750	0	0
Wallis and Sons, G. E. ...	3,744	0	0
Hitchins, D. ...	3,545	5	9

BRAINTREE (Essex).—For the erection of new vagrant wards, receiving wards, board and committee rooms. Mr. F. Whitmore, architect, 17, Duke-street, Chelmsford. Quantities by Mr. J. Sydney Parmenter, Braintree:—

White and Sons, Bow, E. ...	£4,080	0	0
Diss, Alfred, Colchester, Essex ...	3,343	0	0
Johnson, F., Chelmsford ...	3,291	13	0
Hawes, G. E., Norwich ...	3,290	0	0
Everett and Sons, Colchester ...	3,250	0	0
Parmenter, Samuel, Braintree ...	3,240	0	0
Smith and Sons, Witham ...	3,200	0	0
Girling and Coe, Ipswich ...	3,197	0	0
Baynes, Badcock and Co., Wells, Somerset ...	3,155	0	0
West, Ernest, Chelmsford ...	3,085	0	0
Brown, Alfred, Braintree (accepted) ...	2,995	0	0
Kerridge & Shaw, Cambridge ...	2,994	0	0

Architect's Estimate, £3,250.

CHYANDOUR (Cornwall).—For the erection of a police-station for the County Council. Mr. Oliver Caldwell, architect, Victoria-square, Penzance:—

Carkeek, A. ...	£1,545	0	0
Stephens, W. ...	1,097	0	0
Nicholls, J. ...	1,082	0	0
Odgers, J. ...	1,048	0	0
James, T. ...	1,005	0	0
Trythall, A. ...	987	0	0
Trounson, W. H. ...	968	0	0
Miners, George, Marazion (accepted) ...	915	0	0

CROWBOROUGH.—For building a new public house, the Rose and Crown, for Messrs. Ballard and Co. Mr. Curtis Card, F.S.I., architect, Lewes:—

Wells, W., Lewes ...	£1,167	0	0
Wickens and Son, Crowborough ...	1,162	0	0
Wickens, D., Crowborough (accepted) ...	1,018	0	0
Packham, Uckfield (withdrawn) ...	800	0	0

DARENTH (Kent).—For the erection of school buildings near Green-street Green, for the School Board. Mr. F. M. Kirby, architect, Galley-Hill, Swanscombe. Quantities by architect:—

Miskin, C. ...	£1,790	0	0
Young and Lonsdale ...	1,713	0	0
Carter, H. J. ...	1,706	0	0
Grady, T. D. ...	1,699	0	0
Somerford and Son, H. ...	1,636	0	0
Trueman, J. ...	1,625	0	0
Multon and Wallis ...	1,499	0	0
Wilford, J., Snodland, Kent* ...	1,399	10	0

* Accepted.

Reading Cases may be had on application to the Manager. Price, 2s. each.

GOSFORTH (Northumberland).—For additions to Newcastle City Asylum, Caxfold, for the Visiting Committee. Mr. J. W. Dyson, Architect, 18, Grainger-street, Newcastle-on-Tyne. Quantities by Mr. George Connell, 42, Grainger-street, Newcastle:—

Tyrie, W. C. ...	£119,753	0	0
Ferguson, John ...	118,906	0	0
Elliott, Jos., and Son ...	118,761	0	0
Pringle, A. ...	118,372	0	0
King, C. W. ...	118,189	0	0
Lumsden, T. ...	117,000	0	0
Lowry, J. and W. ...	115,892	0	0
Warburton, Saml. ...	113,333	0	0
Scott, Walter, Newcastle* ...	113,311	0	0

* Accepted.

HALESWORTH.—For enlargement of Girls' and Infants' School and erection of outbuildings and other work, for the Managing Committee of Halesworth National Schools. Mr. Arthur Pells, Architect, Beccles:—

Martin and Son, Bungay ...	£604	0	0
Brook and Sons, Aldeburgh ...	510	0	0
Cuttings and Sons, Saxmundham ...	488	0	0
Woodyard, F., Halesworth ...	365	0	0
Howard and Sons, S., Halesworth* ...	355	10	0
Stannard, J. W., Yoxford ...	298	10	0

* Accepted.

KNAYTON.—For building Wesleyan Chapel and Classroom at Knayton, near Thirsk. Mr. Thomas Stokes, Architect, Thirsk. Quantities by architect:—

Manfield, J. R. Thirsk, bricklayer, mason and plasterer. Rulcroft, J. W. and J. D., Thirsk, joiner. Jackson, J. W., Thirsk, plumber and glazier. Dodgson, W., Thirsk, slater. Rutherford, J., Thirsk, painter. Watson, J. and S., Thirsk, smith. Total, £385.			
---	--	--	--

LLANISHEN.—For erecting house, shop and stables at Llanishen, for Mr. E. Williams. Mr. A. S. Mead, architect, Cardiff.

Gould & Burns ...	£882	8	2
Cox & Bards ...	827	12	6
Hatherley & Carr ...	797	0	0
Richards & Co. ...	785	0	0
Hanson, S. ...	765	3	0
Cod, T. ...	761	13	0
Powell & Mansfield ...	726	1	9
Wood, T., & Son (accepted) ...	675	0	0

LONDON.—For alterations and additions at the North Star Hotel, Finchley-road, N.W., for Mr. J. T. Vincent. Mr. Albert E. Primrose, architect, 2, Broad-street buildings, E.C. Quantities by Mr. R. J. Stamp:—

London and Co. ...	£2,398	0	0
Marchant and Hirst ...	2,283	0	0
Davenport ...	2,176	0	0
Gould and Brand ...	2,146	0	0
Drew and Cadman ...	2,132	0	0
Courtney and Fairbairn ...	1,833	0	0
S. R. Lamble (accepted) ...	1,749	0	0

LONDON.—For erecting and completion of residences, Lyndhurst-road, Child's Hill Park, for the proprietors, according to the drawings and supervision of Mr. George Carter, architect, 513, Holloway-road, N. No quantities:—

	No. 1 Tender.	No. 2 Tender.
R. D. Lowms & Sons	£1,330 0 0	£3,810 0 0
Budd and Co. ...	1,152 0 0	3,396 0 0
Kirby and Chase ...	1,140 0 0	3,360 0 0
H. Cattle ...	1,100 0 0	3,300 0 0
W. Wells ...	1,020 0 0	3,060 0 0
Architect's estimate	1,035 0 0	3,090 0 0

CARTER & CO

TILES MOSAIC FAIENCE

Poole Dorset

LONDON.—For erecting a new department for infants on the site in Waterloo-street, Hammersmith, to provide accommodation for 490 children and for carrying out works at the existing school, for the School Board for London. Mr. J. T. Bailey, architect:—

Shillitoe, J., & Son ...	£12,230	0	0
Holliday & Greenwood ...	11,604	0	0
Downs, W. ...	11,420	0	0
Holloway Bros. ...	11,345	0	0
Lathey Bros. ...	11,273	0	0
Yerbury, R. A., & Sons ...	11,112	0	0
Atherton & Latta ...	10,950	0	0
Longley, J., & Co. ...	10,807	0	0
Nightingale, B. E. ...	10,798	0	0
Cox, C. ...	10,250	0	0

Lawrence, E., & Sons, Wharf-road, City-road* ... 10,154 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For building new postmen's office at Maida-hill for the Commissioners of H.M. Works and Public Buildings

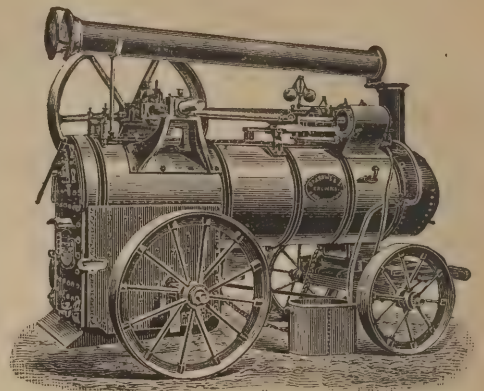
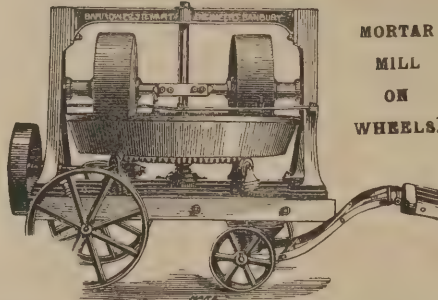
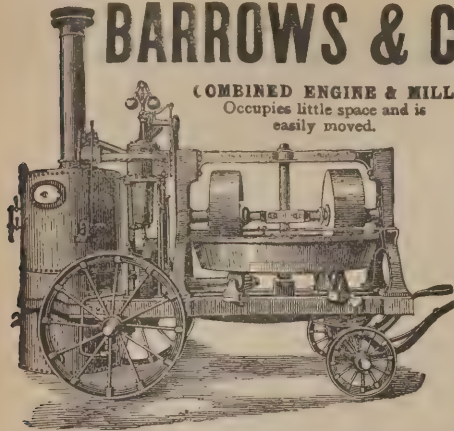
England, M. B. ...	£3,389	12	0
Clifton, H. C. ...	3,320	0	0
Spiers & Son ...	3,250	0	0
Multon & Wallis ...	3,249	0	0
Scrivener, W., & Co. ...	3,224	0	0
Prestige & Co. ...	3,188	0	0
White, T., & Son ...	3,140	0	0
Tyerman, T. ...	3,083	0	0
Chichen, F. T. ...	3,045	0	0
Tomes, H. E., & Son ...	2,933	0	0
Wells, W. ...	2,895	0	0
Godson, G., & Sons ...	2,863	0	0
Nixey, G. (accepted) ...	2,678	0	0
Lawrence, E., & Sons (withdrawn) ...	2,590	0	0
Nightingale, B. E. (withdrawn) ...	2,495	0	0

NOTTINGHAM.—For the erection of shops and offices, King-street and Long-row, for Mr. H. Butler. Messrs. Arthur Marshall and George Turner, Architects, Cauldon-place, Long-row, Nottingham:—

Hutchinson, J. ...	£6,945	0	0
Vickers, J. H. ...	6,570	0	0
Clark, A. B. ...	6,500	0	0
Scott and Son, H. ...	6,420	0	0
Wheatley, J. ...	6,420	0	0
Bell, A. G. ...	6,414	0	0
Vickers, H. ...	6,400	0	0
Dennett and Ingle ...	6,394	0	0
Gilbert and Gabbitass ...	6,382	0	0
Messom, F. ...	6,350	0	0
Whittaker, T. ...	6,300	0	0
Hodson, J., and Son ...	6,255	0	0
Savage, W. ...	6,210	0	0
Cuthbert, T. ...	6,041	0	0
Thomas, J. H. ...	5,877	0	0
Evans, F. ...	5,750	0	0
Dennett and Williamson ...	5,775	0	0
Barlow, T. (accepted) ...	5,689	0	0

[All of Nottingham.]

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills. Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

RUABON.—For building new Court House. Mr. R. Lloyd Williams, County Surveyor, Denbigh:—
Brown, T., Chester ... £3,330 0 0
Jones, J. F., Cefn ... 1,935 0 0
Davies, J., Ruabon ... 1,804 0 0
Gethins, Shrewsbury ... 1,860 0 0
Jenkins and Jones, Ruabon ... 1,795 0 0
Rogers, W., Wrexham (accepted) ... 1,695 0 0

SLAITHWAITE.—For warehouse and three shops in Britannia-road, Slaithwaite, for the Colne Vale Corn Millers, Limited. Mr. J. Berry, Architect, 9, Queen-street, Huddersfield:—
Ellis, John, Linfit Hall, Linthwaite, masonry.
Varley, J., and Son, Carr-lane, Slaithwaite, joinery.
Goodall, Francis, Marsden, plumbing.
Walker, James, 45, Carr-lane, Slaithwaite, plastering and painting.
Jowitt, W. E., John William-street, Huddersfield, slating.
Calvert and Co., Folly Hall, ironfounding.
Cooke, John, Little Royd, Huddersfield, concreting.
Total, £2,800.

SWINDON.—For erecting an Infant School and alterations and additions to the Haydon School, for the Rodborne Cheney School Board, Mr. William Drew, M.S.A., Architect to the Board, 22, Victoria street, Swindon:—
Gerring, W., New Swindon ... £845 10 0
Flewelling, H., Wootton Bassett ... 730 0 0
Williams, C., New Swindon ... 724 17 0
Chambers, W., New Swindon (accepted) 615 0 0

WORCESTER.—For New Class Rooms, Royal Grammar School, Worcester. Mr. A. Hill Parker, Architect, Worcester:—
Escourt and Son ... £3,138 0 0
Stokes, H. ... 2,955 0 0
Bromage and Evans ... 2,947 0 0
Kendrick, J. ... 2,899 0 0
Vale, T. ... 2,607 0 0
Wood, J., and Sons ... 2,687 0 0
Collins and Godfrey, Tewkesbury* 2,630 0 0
* Accepted.

CONTRACTS OPEN.

GREAT BENTLEY SCHOOL BOARD. TO BUILDERS AND CONTRACTORS.

The Great Bentley School Board invite TENDERS for the ERECTION OF NEW SCHOOLS at Great Bentley, Essex, for 250 Children, Board Room, and Master's Residence, Boundary Walls, &c.

Drawings and Specifications may be seen at the Office of Mr. J. W. START, F.S.I., &c., Architect, Colchester, also of Clacton-on-Sea and Harwich, on and after the 30th instant.

Builders wishing to Tender must send in their names at once, together with the sum of One Guinea, to be deposited for the quantities, which will be returned on receipt of a bonâ fide Tender.

Tenders, on forms supplied, sealed and endorsed "Tenders for Schools, Great Bentley," should be addressed to the Board, and delivered at the residence of their Clerk, by TEN o'clock on THURSDAY morning, the 23rd day of MAY, 1895.

Power is reserved to reject the lowest or any Tender.
Colchester, By Order,
April 25th, 1895. C. D. KEIGWIN, Clerk.

TO CONTRACTORS AND PAVIORS.

The Urban District Council of Melton Mowbray, in the County of Leicester, require TENDERS for PAVING the FOOTWAYS of certain streets with Patent Victoria Stone and "In Situ" Concrete Paving, Kerbing, Channelling, &c.

Applications for specification and bill of quantities to be made on or before Tuesday, the 7th day of May, to Mr. EDMUND JEEVES, Nottingham-street, Melton Mowbray, Surveyor to the above Council, accompanied by the sum of One Guinea, which will be returned on receipt of a bonâ fide Tender from the applicant.

Plans may be seen at the Surveyor's Office any day between the hours of Ten a.m. and Five p.m., and sealed and endorsed Tenders must be sent to me at or before FIVE o'clock p.m., on WEDNESDAY, the 22nd day of MAY instant.

The Council do not bind themselves to accept the lowest or any Tender.
RICHD. BARKER, Clerk to the Council.
Sherrard street, Melton Mowbray,
May 1st, 1895.

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD. W

SMOKEY CHIMNEYS & DEFECTIVE VENTILATION.

**THE
"DULCE DOMUM"
CHIMNEY TOPS & VENTILATORS
(Downes' Patent).**

The only Chimney Top which can be Easily Swept with the Ordinary Apparatus without being damaged. A Positive Preventative of Down-Draught, so Constructed that it Creates a Continuous and Powerful Up-Draught. Simple in Construction having No Movable Parts, Nothing to Oil or Repair. Cannot Get Out of Order. Strongly Made in Galvanised Iron. Once Fixed will Last for Years. Applicable also for Ventilating Public Buildings, &c.

Testimonials can be seen and prices obtained at the Patentees' Offices—
11, THE PARADE, Lewisham High Rd., New Cross, LONDON, S.E.

Soil Pipe Ventilator.

Chimney Top.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,
59 & 60, CHANCERY LANE, LONDON, W.C.
N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

TO BUILDERS and CONTRACTORS.

CONTRACT No. 1.

The Guardians of the Mile End Old Town are willing to receive TENDERS for the ERECTION of a new STEAM LAUNDRY and COTTAGE at the Infirmary, and for certain ALTERATIONS and ADDITIONS to the LAUNDRY and BOILER-HOUSE, at the Workhouse, all situate in Bancroft-road, London, E.

The plans can be inspected and copies of the specifications and bills of quantities obtained of the Architect, Mr. CHAS. F. BURDEN, at his Office on the premises, on and after THURSDAY, MAY 9th, 1895, between the hours of TEN a.m. and FOUR p.m. on production of a receipt of the deposit of a £10 Bank of England Note, made with the undersigned, which deposit will be returned to parties sending in a bonâ-fide Tender at the time and in the manner specified, accompanied with such specifications and bills of quantities.

Sealed Tenders, endorsed on the outside "Tender for Laundries," properly filled up and attested, must be delivered at my Office not later than FIVE o'clock on the evening of the 23rd day of MAY, 1895.

Persons tendering will be required to observe such hours of labour, and pay such rates of wages as are generally considered fair with the several trades engaged, and to enter into a bond with approved sureties for the due performance of the contract.

The Guardians do not bind themselves to accept the lowest or any Tender.

WILLIAM THACKER,
Clerk to the Guardians of the Hamlet of
Guardians' Offices, Mile End Old Town.
Bancroft-road, London, E.,
April 24th, 1895.

WAR DEPARTMENT CONTRACT.

NOTICE TO BUILDERS, PAINTERS, &c. TENDERS are required for PAINTING, WHITEWASHING, &c., internally and externally, various BARRACKS and BUILDINGS in the Woolwich Royal Engineer District. Persons desirous of tendering for the execution of the above work must leave their names and addresses at the Royal Engineer Office, Mill lane, Woolwich, on or before the 14th MAY, 1895, when a form of Tender, Specification and Schedule of Prices will be issued to each candidate upon the payment of 15s.

Persons or firms not known to the Commanding Royal Engineer must produce references as to their competency to carry out satisfactorily a large painting contract.

The Secretary of State for War does not bind himself to accept the lowest or any Tender.

R. T. ORPEN,
Lieut.-Colonel R.E.,
Commanding Royal Engineer,
Woolwich District.

BOROUGH OF BRIGHTON. TO CONTRACTORS AND OTHERS.

Notice is hereby given that the Council of the said Borough will receive TENDERS from such persons as may be willing to enter into a contract for the CONSTRUCTION of an ENGINE HOUSE and BOILER HOUSE and other WORKS in connection therewith, at the Corporation Waterworks Pumping Station, in the Parish of Patcham, near Brighton.

The drawings may be seen at the Office of the Waterworks Engineer, Bond-street, Brighton, and specifications, bills of quantities, and forms of Tender may be obtained on and after the 8th MAY inst. at my Office at the Town Hall, Brighton, on payment of the sum of Three Guineas, which will be returned on receipt of a bonâ fide Tender.

Sealed Tenders, addressed to me, and endorsed "Tender for Engine and Boiler Houses," must be left at my Office, at the Town Hall, before TEN o'clock in the forenoon, on TUESDAY, the 14th day of MAY, 1895.

Power is reserved to reject the lowest or any Tender.

FRANCIS J. TILLSTONE, Town Clerk.
Town Hall, Brighton, May 2nd, 1895.

COMPETITION.

TO ARCHITECTS AND OTHERS.

The Urban District Council of Lynton is desirous of receiving COMPETITIVE PLANS and SPECIFICATIONS for the ERECTION of a MARKET, TOWN HALL, and COUNCIL ROOM, and OFFICES, at Lynton, at a cost not exceeding £2,000.

A ground plan of the land can be seen, and further information obtained on application being made to Mr. WILLIAM SQUIRE, Surveyor, Lynton.

The competitor whose plans and specifications are deemed by the Council the best will be paid by the said Council a premium of £10 10s.

Arrangements will probably be made with the successful competitor for carrying out the work.

Plans and specifications to be sent on or before 27th MAY 1895, to

W. A. ROBERTS,
Barnstaple, Devon. Clerk to the said Council.

SPHINCTER WORKS,

EMERSON STREET, LONDON, S.E.

**High Grade Flexible Hoses for
Contractors, Engineers, Builders.**

**FIRE HOSES & HYDRANTS,
HOSES FOR CLEANSING WITH WATER POWER.**

Pumping, Suction, & Dredging Hoses.

Always specify "SPHINX" Brand.

The Builders' Journal.

Vol. I., No. 14.

Tues., May 14, 1895.

ILLUSTRATIONS.

Ashbourne Church : W. White, F.S.A.	209	Screen, Dunster Church: Sydney Newcombe, Architect	215
The Helmet of Salvation in the Rylands' Memorial: Messrs. Heathcote and Rawle, Architects	211	Portrait of Mr. William White, F.S.A.	216
An Interior: Commercial Union Assurance Company's Offices, Manchester: Messrs. Heathcote and Rawle, Architects	212	Proposed Wall Painting over Chancel Arch of Lyndhurst Church: William White, F.S.A.	216
On the Leads, Exeter Cathedral: A Sketch by Sydney Newcombe	213	Church in Course of Construction at Battersea: William White, Architect	217
Ashbourne Church: South-East Angle of Middle Stage of Tower: William White, F.S.A.	214	District Church of S. Saviour, Aberdeen Park, High-bury: William White, Architect	218
		The Rylands' Memorial, Manchester: Messrs. Heathcote and Rawle, Architects	220
		Victoria Institute, Worcester, First Floor, Plan No. 1	223

CONTENTS.

"The Rebuilding of London"	209	Men who Build, No. 13—		Society Meetings	222
Northern Architecture	209	William White, F.S.A.	216	The County Council and its Architect	223
The Proposed School of Art for Crewe ..	210	"Treillage": Trellis-Work	219	The New General Post Office.....	223
On the Use of Models before Building	210	The Work of the Institute	219	Art in Venice	223
Examinations and Lectures: A Chat with Professor Roger Smith	211	Should Government Encourage Art?	220	The Builders' Journal Competitions	224
Bricks and Mortar.....	212	Municipal Engineers at Brighton	220	Trade and Commerce	224
New Memorial Cross at Plymouth	216	The First School of Architecture in England	221	Correspondence	224

The Builders' Journal.

OUR sympathies are for Dr. Joseph Parker. "If London could be rebuilt in any adequate sense, the problem of the unemployed would be laid to rest for at least half a century." Why? asks the man who hears. "Because," says the Doctor, "the rebuilding of London offers the most adequate alleviation of present economic and social difficulties." Joseph Parker is a man of originality. It would not be quite correct to term him a man of depth, either of character or of thought, but he *can* preach, and for that many a wearied man has blessed him. This is the second original idea promulgated by this enterprising preacher. Some years ago he invited the workmen in Holborn to come and smoke their pipes in his Temple, and he also invited them to argue "points" with him in the pulpit. These little festive gatherings he called "Smoke Conferences," but they did not last. Amongst the workers were a dozen or more Classical men—from printers' proof rooms of the neighbourhood—and they soon knocked the bottom out of Dr. Parker's orthodoxy, and he had to find a reasonable excuse to stop the merry meetings. His conferences did not interest us personally, but "The Rebuilding of London" does. The article in the current issue of *The English Illustrated Magazine* is a botch of about the sublimest nonsense a respectably-minded man ever penned. And the sublimest part of it is its sincerity. The Chancellor of the Exchequer is to be asked for £25,000,000, and the "money would be subscribed within a good deal less than a week." The reconstruction "might be divided into eight or ten principal centres." All the Railways in one

centre, "say Ludgate Circus;" all the Churches in another; all the Banks, Exchanges, and Insurance Offices in another; all the Markets in one heap; all the Theatres and Recreational Buildings in another, "the whole constituting a new and glorified Leicester Square." "The Shipping centre, of course, being determined by the River." Why not re-arrange liquid matters generally, and bring the North Sea up to Billingsgate Market? But the funniest

detail of all is that poor little preaching Paternoster Row is to be "abolished," and Fleet Street is to run North and South instead of East and West. "Supposing the idea of Centres to be substantially adopted," continued the Doctor, "there should almost necessarily follow a great scheme of light and water. In every Centre there should be a fountain, as in Trafalgar Square (around which could be grouped figures of eminent Englishmen, not only heroic, but social and civic), which could be banked with flowers and green stuff." Ye ghosts of Covent Garden Market!! "It might be practicable to bring a sea-canal to London, and cut a riverway down to Brighton. It is beyond all doubt that London could be so rebuilt as to bring back thousands who now travel miles daily between the City and the Suburbs." Poor Suburbs! What would Joseph Parker do with these? "The greatness, the utility, and, indeed, the *poetry* of the whole scheme might happily affect the sense of duty all round." We hope it would, particularly the poetry. The duty of the first right-minded Constable is to secure this poet of Destruction. He is not safe to be "at large."



ASHBOURNE CHURCH: W. WHITE, F.S.A.

Northern Architecture. THE opening of a School of Architecture in Liverpool, and the forceful address by Mr. T. G. Jackson, A.R.A., will undoubtedly give an impetus to Architectural matters in the North. Liverpool has turned out some excellent work, and may boast of several buildings of import and magnitude. There are still great opportunities in the City, and, if the Cathedral ever be built, one chance, at least, will be given a man wherewith to make or mar his name. There is always the danger of a "School" sterilizing originality and individual inceptiveness. The students "catch" a fashion or a vogue, and Professors

are apt to inoculate their pupils with their own ideas. We hold with Mr. Jackson that there is nothing better than the apprentice system, though it has its faults. Drilling and drudgery are the golden keys that open the gates to all professions. And notably in Art all restraint increases the ultimate achieving power. It is only when a man is thoroughly familiar with his tools and texts and tenets that he can afford to shake off the shackles of schools and give wings to his own individuality. One good point in the Liverpool School's favour is that "working professors" have been engaged. These will knock into shape much promising material, we do not doubt, and once students are thoroughly grounded in, at least, the very elements of planning, and with some knowledge of building construction, we may hope to find the somewhat jejune and in some ways remarkable efforts of well-meaning beginners a thing of the past. If every young architect would spend, as Mr. Jackson suggested, a year or more in a mason's yard, working as a mason, original ideas would be formed which could not be got in any other way, and this would save him from those mistakes in the construction of material which so characterize modern practice. Mr. Jackson's suggestion that master builders open their yards and workshops for the reception of students is a good one, but we expect the Building Trades' Federation will fall foul of it. However, we heartily welcome the Liverpool School; and, as we know several of its Professors, we are quite confident that it will ultimately give us a clear, a convincing, and a chastening influence in Northern Architecture.

ONE of the handsomest modern Churches in the Midlands is St. Paul's Parish Church, Burton-on-Trent, at which, on Thursday last, the Archbishop of York, dedicated the Reredos and organ, together with numerous other gifts, presented to the Church by the patron, Lord Burton. The edifice was built and endowed by the late Mr. M. T. Bass, who also erected the adjacent Church of St. Margaret as a Chapel-of-ease, with Sunday Schools, the total cost, including the Vicarage and its endowment, amounting to £68,000. Lord Burton added a beautiful Chancel Screen, pannelled oak Porches at the two entrances, oak Vestry fittings, and a new Sacristy. The South Chancel Aisle has been converted into a Memorial Chapel, and is associated with the name of Lord Burton's nephew. It possesses an elaborately-painted roof, four choice stained-glass windows, a marble pavement, and side Altar, and is used for daily service. The roof of the Chancel and that under the Tower have also been richly decorated in gold and colours. The chief points of interest, however, are the new Reredos, the marble pavement, and the organ. The first-named, erected by Mr. R. Bridgeman, of Lichfield, is 23 ft. in height, and displays a central panel in red Shawk stone, portraying the Saviour on the cross, with SS. Mary and John at the foot. The whole is surrounded by carved panels, canopies and figures. The side portions are lower, and are divided into four panels, containing figures of SS. Hugh, Paulinus, Chad, and Aidan. The whole of the Chancel has been relaid (by Messrs. Farmer and Brindley, London) with a pavement in polished red and white marble, a reproduction in the main of that at St. Anastasia, Verona. The whole of these alterations and additions have been carried out from the designs of Mr. G. F. Bodley, A.R.A., at the sole expense of Lord Burton, the total expenditure representing nearly £40,000. Thus the founder and his son, the present patron, may be said to have spent on the two Churches the sum of £96,000.

THE PROPOSED SCHOOL OF ART FOR CREWE.

STARTLING REPORT BY THE ASSESSORS.

THE Report of Messrs. Sugden & Son, of Leek, upon the twelve designs submitted in competition for the New School of Art at Crewe, is a concise and a highly interesting document—quite worthy of a very careful perusal by men who aspire to a remunerative practice by means of successful competition work. The competition was limited to twelve competitors and it is correct to assume that these men were directly invited by the Technical Institution Committee because each was considered competent to design such a building. If such was really the case—and, of course, it must have been—then the opinion of Messrs. Sugden, as expressed in their report, is positively startling. The assessors were zealous in their work. They spent five days in judging the drawings, visited the site, and concocted an elaborate Table of "Points" to assist them in their awards. From the twelve competitors two sets of drawings, those of James Stevens, F.R.I.B.A., and Messrs. Woodhouse and Willoughby, F's.R.I.B.A., all of Manchester, were selected as being superior to any of the rest, and eventually Mr. Steven's scheme was cordially commended to the Committee's acceptance. It is not, however, with these two sets of drawings that we have to deal, but with the remaining ten sets in which the assessors can hardly find a couple of good points. For instance:—

The elevations of Design No. 11 are impossible. The lighting of the Lecture Hall is bad, and that of the Elementary Art School much worse; whilst the lighting of the Painting Room from all sides and its remote position in the Tower is also inadmissible. The Staircase is ineffectively treated. The space devoted to Corridors, &c., in Design No. 2, is excessive, and the competing entrances and maze of intervening steps on ground floor quite uncalled for. Extensions would make the main Corridor very dark indeed. The Lecture Hall is badly lighted from the West and has a "panic door" indeed, seeing that, when broken open, the escaping crowd would suddenly fall 3½ feet to a lower level; this trap to descend from is badly placed, and the room itself, as in most instances in this competition, acoustically bad. The top lighting of Elementary Art School is redundant and would give the deplorable effect of all sky-lighting seen through windows from the outside. The division of light as between the Painting and Antique Rooms is unjust, and the separation of Boys' Lavatory from their cloaks, and on a higher floor, objectionable. Design No. 3 covers the whole of the site and depends largely upon skylights for its lighting, costly to maintain, dismal in effect, creating down draughts and liable to be obscured by snow-fall. Satisfactory extension would be difficult. Amongst many defects may be named: waste of space in Corridors, confusing steps dividing the ground floor levels, inaccessible Internal Court, Art School windows too near Causeway, Art Master too secluded, Lecture Hall Entrance too contiguous to Laundry and Cooking Department. *The Elevations are pardonable.* (The italics are ours, the subtlety of the Extension warrants them).

The dome feature dominates Design No. 9 to its destruction. The Elementary Art School would have the undesirable quality of circular-domed rooms (e.g., the Picton Reading Room at Liverpool), that the slightest sound reverberates both loud and long, in a positively distressing way. The Castle Street Elevation is deplorably bad and the general effect squat, and more suited to crown a hill than depress the foot of a declivity. There are numerous minor defects, such as Laundry badly lit and close to Art School Entrance and Stairs, superfluous separate Women's Stairs to Art School, &c.

Is it that our architects are really deficient in the art of planning and in the science of construction? When a practising architect finds it necessary—in his capacity of assessor—to comment upon his fellow's work in such scathing judgment as appears in this Report, it almost makes us think that after all there is beginning to be some truth in the popular assumption that an architect is sometimes a superfluous luxury. Personally, we detest

artistic competitions, but a few more reports like this upon the designs submitted for the Crewe School of Art will induce us to reconsider matters.

ON THE USE OF MODELS BEFORE BUILDING.

ARE THEY PREFERABLE TO PERSPECTIVES?

IT is essentially necessary that a person about to build should thoroughly make up his mind as to the design he is about to adopt; that every part of it should be minutely considered, and that no alterations whatever take place after the building is commenced. To satisfy himself in this, it is advisable to be at the expense of having one, two or more perspective views taken from different points of sight, in order to ascertain more correctly what would be the general effect of the building altogether when finished, but I would sooner recommend having such money expended upon a model, which would impress the mind more satisfactorily than the most agreeable and specious drawings in perspective could do, however accurately they may be drawn, well shadowed or finely tinted.

A complete though plain model of the design should be first fixed upon, made very accurately to a scale of at least a quarter-of-an-inch to a foot, the several storeys to be contrived so as to lift on and off at pleasure, that every part may be easily and minutely scrutinised and measured. Those not so far conversant with plans as to judge therefrom with certainty, ought not to grudge the trifling charge of three, four, or even five guineas, for a model of this kind—the information and advantages to be derived from it may prevent much of the approbrious work of alteration, save a great deal of trouble, and a considerable sum of money.

Being possessed of such a model, and having obtained thereby a clear and satisfactory idea of the forms, situations, connections, and dependencies of the several apartments, the next step should be to minute down the general dimensions of such of them, at least, as are of the greatest consequence. In order to test the competency of the magnitudes, the dimensions of several rooms of similar descriptions should be tried. This should by no means be considered a useless trouble; the ideas which we form of magnitudes are often exceedingly deceptive, and, therefore, the best and most certain means should be adopted to regulate and correct them. As to the common method of measuring out the lengths and breadths of the intended apartments, in the open air or in some very large room, and setting chairs, tables, or screens, to confine their dimensions and shape their forms—this method will, by no means, answer the purpose so well—a tolerably good room, tried in this way, will appear confined and trifling.

Having proceeded thus far, it will be advisable to procure a few blocks of wood, cut out by the scale of the model to the proper general dimensions, the shapes of bedsteads, tables, chairs, and other common pieces of furniture—the placing of which in the apartments of the model will be of considerable use in judging of the conveniences of the design.

Let the intending owner be resolute in this: *that he do not by any means suffer a stick or a stone of his building to be altered after it is once begun*, let friends or foes say what they will. To examine the proportions of the exterior of a design, and to form a competent judgment of its effects, supposing an exact model has been made, let a board or table (covered with green cloth) be raised to such a height so that the top may be just as many feet and inches—by the scale of the model—below the eye as the eye is above the ground—the model, being placed upon this board or table in the open air, clear of the view of other objects, will then produce the same effect, in every respect, as the building would if it were actually completed.

This must be far preferable to any ideas that perspective drawings can furnish, and, perhaps it would not be doing justice to the exterior of a model to examine it in any other situation, with a view to judge of its merits or effects.

EXAMINATIONS AND LECTURES.

A CHAT WITH PROFESSOR ROGER SMITH.

PROFESSOR ROGER SMITH is half hid by papers and plans and academical data and "authorities" if you call upon him at his office in Temple Chambers, but he will readily "lecture you" in most agreeable fashion until you grow almost to envy the students at University College, where the Professor holds the Architectural Chair.

It was to gain a few hints for those toiling by the hard way of Examination, and also the Professor's view on the value and peculiar usefulness of lectures, that I called the other day at his office and found him primed, having had some warning of my coming.

There is a bookish as well as an architectural air about the Professor's room, and no end of wise writers on Architecture—Weall, I doubt not, though I did not look, and Donaldson, and surely Viollet le Duc, loom largely in old-fashioned book-cases with glass doors.

And Question and Answer, Professor?" I began, "Tell me, is it possible to 'examine' a man Architecturally—that much debatable point?"

"Yes, I think it is, in many ways. It is not quite so easy by paper as by oral examination. I believe in oral examination. You can find out a man's strong point in Architecture—if he has one."

And there was a merry twinkle in the Professor's eye.

"But, pray, a nervous man!"—I interjected. "A modest man—one afraid of his own abilities?"

"Well, you know, we try to put him at his ease; I personally believe very much in discovering if a man has any special knowledge, any grasp of a single subject, and it is not very difficult to discover. Then we humour him a little if we think him nervous."

"And, surely, you can examine a man as to how general building operations should be conducted?"

"There is a good deal that one can't test, it is true, so much skill that cannot be set down on paper. But I take it that a student should have some knowledge of the historical and archæological aspects of Architecture; should, moreover, have this knowledge well tested; should be capable of estimating and aware of the strength and quality of materials and intimate with the way in which to put them together."

"I should say, also, with regard to oral examination, that we base the questions on a specific day's paper work; that is to say, we take answers to the days' questions as guides in any oral examination, so that no sudden subject is sprung upon the student's mind. In drawing, I admit, it is more difficult to test him. Some students are much quicker than others, but I know of no single test better than the simple problem I invariably set at South Kensington, to draw from memory some building or detail of building which the student has personally studied on the spot."

"I should like to ask," said I, "how you account for the fact that the man who can plan well is rarely able to draw a pretty perspective of his own work, and, reversing the order, the picture-que draughtsman so often utterly fails in his planning?"

"It seems to me," he said, "that varying

qualities of mind are responsible for this. Architects may be described as either clever at plans, or clever at sketching (if clever at all), and it is rare that you find the two qualities of mind in the one man. When you do find him, you have a great architect."

"I wish you would give me a 'tip' about plans."

"Well, perhaps I cannot do better than give you the axiom which generally, I fear, startles young students: *that the most important part of a building is the floor*. When all is said for drawing, planning is of most value."

"And now, please give me, say six hints for the Examined: a few principles or tenets,

part of an answer that is correct he receives a proportion of marks. The Examiners are bound to give some marks for any answer that is even partly correct. Many students give up a question altogether if they cannot answer it in its entirety.—

3. A man should answer most thoroughly the one, two, or three questions upon which he feels himself best prepared. There is then a chance of testing the quality as distinct from the quantity of his knowledge. I am always anxious to find students who go in for thoroughness and are well versed in one subject, or even branch of a subject.

—4. I always advise a student, at all quick with his pencil, to illustrate his answer by sketches. A sketch helps often where words fail, or a student may be able to express himself more readily by the pencil than by the pen."

"And the question of line?"

"Oh, a clear good line? It may not catch the eye; it may not be so pretty—*chic*, as the French would say—but it has the merit of being true and is not dependent upon any mere trick of effect."

"And No. 5?"

"5. The student should tackle the difficult questions, or the difficult part of a mixed question if he can. It shows pluck. Even though there may be imperfections, an Examiner thinks more favourably of the student who boldly faces his problems. It is an evidence of his future resource and power in surmounting difficulties. 6. Let the student *begin* with the subject he can answer best. He is then fresh. He can see clearly, think clearly, write clearly. We get the cream of his knowledge. Too often a student leaves his 'strong' question to the last and then finds himself either tired or hurried. It is a singular thing that one class of men naturally rely upon the pencil for the expression of their thoughts, and the other upon the pen. The latter generally ends with the *business* of the profession, and the other excels with designing.

Further advice by Professor Smith was that a man should make himself as competent as he could, grasping every opportunity, which, indeed, is a truism; and then we fell-a-talking of lectures.

"Above all," said he, "a lecturer should have a special aptitude for his work; he should be of wide experience and able to express himself in the concisest English. The wisest way to write out a lecture before it was delivered, and the next best was a full and careful batch of notes. To interest his audience should be his aim rather than the amount of information capable of being compressed into a single lecture, and the choice of a subject was, perhaps, the most difficult thing of all. Many could write—and write well—providing a subject were given them."

Domestic Architecture had wonderfully improved in the Professor's lifetime, and though there was much that was imperfect, many men were now fairly competent, and those of long and careful training were capable of designs of exceeding delicacy and variety. Terra Cotta was very susceptible to ornament, providing it were not overdone. He considered that English modern Architectural work was superior to that of Germany.



THE HELMET OF SALVATION IN THE RYLANDS' MEMORIAL: MESSRS. HEATHCOTE AND RAWLE, ARCHITECTS.

let us call them what we will, to help the student to success."

"Very well. No. 1.—Let the student really *answer the questions* that are put to him. It is so easy to evade questions, to fence with them, to put in something beside the mark; to hedge, as it were. It seems to me that many students come up with loose ideas and lack the facility of expression in plain, straightforward, clear-cut English. An Examiner is always suspicious of an evasion.—2. He should answer as many questions as he can. Even let him give part of an answer—all he knows. For every correct answer a student gets full marks; for every

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,

14th May, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

MR. CARÖE, the newly appointed Architect to the Ecclesiastical Commissioners, is a son of the senior of one of the oldest houses in the corn trade of Liverpool, in which town Mr. Caröe was born. He took his M.A. at Trinity College, Cambridge, was an articulated pupil of Mr. John L. Pearson, R.A., and has been in business on his own account for twelve years, during which time he has been actively engaged in carrying out Church and other works. He is a Fellow of the Antiquarian Society, a Fellow and Member of the Executive Council of the Royal Institute of British Architects, a member and hon. secretary of the Art Committee of the R.I.B.A., is a past vice-president of the Architectural Association, and now president-elect for the ensuing year.

A CORRESPONDENT writes to a Manchester contemporary relative to the proposed West Front to the Cathedral: In the drawing now exhibited at the Royal Academy and in the obviously inspired descriptions of the design that have appeared in print, much is made of the ceremonial West Entrance for special use on State occasions. May I ask if the Architect, or if the Dean and Chapter, have realised the effect of a great congregation being discharged into the street direct from the proposed ceremonial doorway, and into such a street, with the throng of passengers hurrying to and from the railway? It is bad enough in all conscience now, when we have some space between the street and the west door of the Church. But if, as is threatened, there is no space, how will it be then? The design, whatever may be its merits, suggests a want of intimate acquaintance with local circumstances, and also a want of a thorough and lengthened study of the site. There are plenty of ways of spending money wisely and well about the Cathedral. Why, then, merely because there is money to spend, waste it in doing what is not wanted, and in what will, on the whole, injure rather than improve our Old Church and its surroundings?

In addition to the recently-acquired series of drawings by Professor Ruskin, from which various plates, illustrating "The Seven Lamps of Architecture" and "The Stones of Venice," were produced, one of the original drawings for "Modern Painters" has also come into the possession of the Guild of St. George Sheffield. The drawing is a careful study of

mountain peak scenery, representing, as signed by Mr. Ruskin, with the date when it was drawn, "The Matterhorn, from the Moat of the Riffelhorn, August 7, 1849"; and the view is described in connection with the engraving of it, so finely executed by Mr. J. C. Armytage, in the fourth volume of "Modern Painters," pages 238-9. It is to be hoped that as time proceeds many more such drawings by the founder of the Museum may find their way to this most suitable repository for all that relates to the life and work of the great "Art prophet," who has done so much for Sheffield.

At the London County Council meeting, Mr. Burns, M.P., admitted that the building work of the Department had not come out well, but he had learned from the President of the Board of Trade that in four years 3,000 builders had gone bankrupt, with liabilities of £3,000,000. Who paid for that? Having regard to the extras of the successful builders, and the scamped work of those just able to keep their heads above water, it was the creditor ratepayer who had to pay the difference. He would remind the Council that the Works Department was started because 18 "lowest tenders" were withdrawn by contractors, and there was evidence of rings among them. There had

five to be appointed by the leading Scientific and Art institutions of the country, including the British Museum, the National Gallery, the Royal Academy (two members each), and the Society of Antiquaries, the Linnæan Society, the Universities, and the Kyrle Society (one member each). Among the objects for which the Trust is established is, as regards lands, the preservation (so far as practicable), of their natural aspect, features and animal and plant life. The Council is an influential one, including the names of the Dukes of Devonshire and Westminster, the Marquess of Dufferin, the Marquess of Ripon, the Earl of Rosebery and other members of the Government, Professor Huxley, Sir John Lubbock, a number of Royal Academicians, and many prominent writers and workers in the field of Science.

ARUNDEL CASTLE has been added to and improved by successive heads of the great ducal house, and this tradition is being carried on by the present Duke of Norfolk, whose desire is to restore it to a thirteenth century structure, in keeping with the rest of the building, for Arundel Castle belongs to the great period of Architectural work which gave this country such enduring memorials of constructive genius as the Cathedrals of Salisbury and Winchester.

The Castle occupies a most lovely situation on the crown of the hills below which flows the Arun. The most historic part is the "Keep," which crowns a mound some 100 ft. high, where King Alfred is said to have held his camp, its circular form being identical with that of Windsor Castle. This notable landmark will stand as it is. There is already a very marked progress with the work now in hand. From the summit of that part of the building now completed can be obtained a view of some of the loveliest woodland and landscape scenery in the country.

THE old Lighthouse at Spurn, which has befriended the mariner for 20 years more than a century, will soon be superseded by an entirely new structure, in the erection of which upwards of 300,000 Staffordshire bricks have been used. The new house will be supplied with a triple light.

The old lighthouse associated with the great engineer Smeaton, was commenced in 1771, and completed in 1773. In the sixth year of George III. an Act was passed for taking down and rebuilding the Lighthouses then existing at Spurn, one to be 50 feet and the other 90 feet high. The Lighthouse at present in use is called the "high" Lighthouse; the "low" light was destroyed in 1776, and again in 1786, after being rebuilt by Smeaton. It succumbed subsequently to the fury of the sea on three occasions, the last in 1830, and was never again upreared. The "high" light is a Circular Tower, with several stories. Smeaton himself, writing of the two Lighthouses in 1793, says, "I had the great satisfaction to find at Hull that the Spurn lights were in such credit among the seamen that they were both esteemed, on account of their clear and brilliant light, to be the best lights in Europe. Frequently the great light of the Spurn has been seen in clear weather from the high ground near Beverley, a distance of 30 miles."

A LIFE-SIZE terra-cotta group of "Christ and the Children" has been presented to Whitworth Park, Manchester, by Mr. R. D. Darbishire, executed in terra-cotta at the Doulton Works by Mr. George Tinworth, the workman-sculptor, whose deeply felt and vigorously wrought reliefs of "Gethsemane"



AN INTERIOR: COMMERCIAL UNION ASSURANCE COMPANY'S OFFICES,
MANCHESTER: MESSRS. HEATHCOTE & RAWLE.

it was true, been a loss, but it would be more than made up in the operations of the present year. Of course, the Works Department was under the disadvantage of paying Trade Union rates of wages, and it was under the further disadvantage of not employing so many boys and learners and hobbledoys as were usually associated with jerry building. He thought it very satisfactory that there was no change whatever as to the character of the work that had been done. Government works nearly always exceeded the estimate, and it was clear that what might be lost in a slightly increased price could easily be gained, and more than gained, by the quality of the work.

THE movement in favour of the institution of a public body charged with the duty of permanently preserving for the benefit of the nation such lands and buildings as may possess exceptional beauty or historic interest, has resulted in the formation of a "National Trust for places of historic interest or natural beauty." The first annual general meeting of this body was held on Wednesday, when the Provisional Council was superseded by the regular Council to administer the affairs of the Trust, to consist of fifty members. Twenty-five of such members were to be elected by members of the Trust, and twenty-

and "Barabbas" and other Scriptural subjects have in their time excited so much attention. Christ is seated, with His left hand on the head of a child who is offering Him a flower. Another child is looking intently up at Him; at His feet lies a third and younger child, confidently asleep. The children are natural and touching, without mawkishness; the Christ seems to us less successful, a conventional Christ-type à la Cornelius, without the peculiar beauty or expressiveness which are to be found, for example, in "le beau Christ d'Amiens." But of course there are limits to expression in terra-cotta. The general effect of the group is good, and its creamy and ruddy tones tell pleasantly against a green tree-background.

DEEP wells, it has generally been held, cannot be profitably sunk except where, as in the Thames Valley, the geological conditions are such as to favour what are known as artesian wells. Here the water pent up in a basin bursts up, when relieved, to the level of the beds through which it oozed down. But some experiments made in Sweden show that water of the purest kind can be obtained by borings in solid rocks. These data have been accumulated by Baron Nordenskjöld, better known as an Arctic explorer, and his son, who has more recently distinguished himself by an examination of the cliff dwellings of Colorado. They find that if a well is sunk in solid crystallised rocks—granite, gneiss, or whinstone—to the depth of from 100 to 160 feet, the well soon fills and continues full by water trickling through cracks in the rocks, due to variations in temperature experienced by the upper part of the mass. Should their experience be confirmed, the result will be of enormous practical importance so far as the water supply of English towns and private dwellings is concerned.

AMATEUR Art has become self-confident enough to hold Exhibitions of its own, and the studios will be shaken to their somewhat flimsy foundations. But after all, Cosway gives the Amateur Art Exhibition ballast. But we may note the Art carving done by a number of boys who are instructed by ladies at Leigh, Tunbridge Wells. Nearly all the examples are in oak, and many of them would do no discredit even to artists of acknowledged fame. Specially to be noted were a pair of bellows, with long handles, the body being copied from an old 17th century panel. An oak easel is most beautifully carved, and so are a number of cabinets, boxes, and chairs, all designed by the boys themselves, who, generally speaking, are the sons of labourers or small farmers, and who support themselves by this industry. Highly to be commended is the copper work of the boys of the Guild and School of Handicrafts at Mile End, and some capital copies of old jewellery, notably a silver Holbein Brooch. Mrs. Netter contributed several cleverly modelled statuettes, the best of which a Psyche, and amongst the artists who gave or lent pictures are the Marchioness of Granby, Mrs. Adrian Hope, Countess Gleichen, Miss Pember, Miss Rose Barton, Miss Jex Blake, Mr. Heseltine, Mr. Hamilton Aidé, Mr. Herbert Marshall, and Miss F. Graham. The Cosway miniatures and oil paintings number 316, together with over

20 of Cosway's pupils, Andrew and Nathaniel Plimer. There have been several important exhibitions of late years in which works of Cosway were included, but this is the first which has been restricted to specimens from the hand of the master and his wife, and it is intended not alone to interest and to please, but to give to students a broad, clear view of what Cosway produced, so that his position in the gallery of English Art may be clearly defined and settled. It will be generally conceded that in Miniature Painting he has had no equal and but few rivals.

THE Executive Committee of the Payne-Smith Memorial Fund announce their decision that the memorial shall take a double form—first, a memorial in connection with Canterbury Cathedral; and, secondly, the completion of Higher Elementary Church Schools.



ON THE LEADS, EXETER CATHEDRAL: A SKETCH BY SYDNEY NEWCOMBE.

ONE very evident feature of this year's Academy is the more than liberal allowance of portraits which it includes. Out of the 887 canvases which the eleven Galleries devoted to oil paintings contain, 181, or more than a fifth, are portraits. In the Water-colour Room, of 384 drawings and miniatures, 171, or nearly one-half, and in the Black and White Room, 31, out of 137 drawings and engravings, or nearly a quarter, come under the same heading; while in the two Sculpture Rooms there are 44 busts and statues out of a total of 102 works. This means that in an Academy showing, without Architectural designs, 1,510 productions, there are as many as 427 portraits—considerably more than a quarter of the total number of exhibits.

A WELL-KNOWN firm of estate agents in Waterloo Place, has been asked by Lord Gerard to find a purchaser for Eastwell Park, in Kent, the magnificent estate he purchased from the Earl of Winchelsea in

the summer of 1892 for close on a quarter of a million of money. The mansion at Eastwell is one of the finest in Kent, and during the life of the late Lord Winchelsea, who resided chiefly in a flat in Victoria Street, it was rented by H.R.H. the Duke of Edinburgh and the Duke of Abercorn. Another interesting Kentish seat that has just come into the market is Sandling Park, comprising a mansion of 2,400 acres close to Hythe; while among the properties that are about to be announced for sale are Tedworth Park, near Andover, which extends over 6,000 acres, and Nevill Holt, on the Leicestershire borders of Northamptonshire, covering close on 2,000 acres.

THAT the auction season for the disposal of large landed estates this year will be short is evident, but that it will be much heavier than usual has been settled beyond doubt by the number of fine estates that have come into the market within the past few weeks. A well-known London firm of auctioneers recently stated that they had a dozen estates, the average extent of which worked out at over three thousand acres, to put up to public competition during the season. Despite the success of the Wrington sale the other day at Bristol, there is as yet no indication of more than the average number of properties being offered in lots, so as to enable the tenants to purchase the freehold of their holdings; but it is more than likely that the habit of submitting an estate for sale in the locality instead of in London will extend as the season advances.

THE announcement is unofficially made that Mr. George Herbert Murray has been appointed Permanent Secretary of the Office of Works in place of Mr. H. W. Primrose, the new Chairman of the Customs Board.

SOME steps should be taken to protect such buildings as Hampton Court Palace, with its irreplaceable contents, from the ever impending risk of destruction which is implied by the presence within its walls of private dwellings. It is not so many years since a destructive fire was caused there by the carelessness of a servant in one of the sets of rooms; and within the last few days a similar accident has imperilled the Palace, which might well have been destroyed had the officials been less prompt. The fire this time is mentioned as having originated in "a store room immediately under the Picture Gallery," a description of the scene of the outbreak which is sufficiently alarming. There are doubtless many deserving people who have every excuse for claiming house room from a grateful nation, but even their merits hardly justify such risks to national property of a peculiarly valuable type.

MR. J. M. ANDERSON, in his award in the competition for Cottage Homes and Schools for the Chorlton Union, said he had carefully examined each one of the 18 sets of designs which had been submitted in competition for the proposed Cottage Homes and Schools in the Township of Styal, Cheshire, and so far as merits in design and adaptability for the purpose of the buildings were concerned,

he had no hesitation in placing the designs in the following order—viz., No. 1, "Snowflake"; No. 2, "A Home"; and No. 3, "Q.E.D." It was, however, extremely unfortunate that the author of "Snowflake" provided accommodation for 286 children only, the condition of the competition being that provision was required for 300 children, in Cottages designed to accommodate not more than 20 in each, the first Cottage to be at the entrance gates and to also act as the receiving ward. The first Cottage, in the design of "Snowflake," was at the entrance gates, but it provided accommodation for six children only in place of twenty, leaving a deficiency of fourteen. In these circumstances he had, with great reluctance, been compelled to disqualify the design of "Snowflake," and he accordingly assigned the first place in the competition to the author of the design bearing the motto, "A Home," and the second place to the author of the design bearing the motto "Q.E.D." The third prize he awarded to the author of plans signed "Village Homes." The Committee had resolved that the award of the prizes offered be in accordance with Mr. Anderson's recommendation, as follows: First, £75, Messrs. Charles Clegg & Sons; second, £50, "Q.E.D.," Mr. J. W. Beaumont; third, £25, Messrs. W. Telford Gunson & Son. All the architects are of Manchester. The Committee further resolved that having regard to the report of the assessor, "that so far as merit and adaptability were concerned, he had no hesitation in placing the plans of 'Snowflake' first," the Board be recommended to adopt the plans of "Snowflake," and that the author be entrusted with the carrying out of the work. Mr. James B. Broadbent, A.R.I.B.A., of Manchester, was the author of the plans. The estimates of the several architects were as follows: "Snowflake," £26,560; "A Home," £34,756; "Q.E.D.," £35,998; "Village Homes," £30,000.

THE extensive work of restoring Bristol Cathedral has been carried out at a cost of £20,000. This makes a total of £100,000 spent on the building in the last forty years, the most recent undertaking being the restoration of the Lady Chapel, the repair of the Central Tower, and improvements to the Choir. The Archbishop of Canterbury, during his recent visit to the Cathedral, was presented with a numerous signed petition in support of a movement for establishing a distinct bishopric in Bristol, and asking him to consecrate, in the restored Cathedral, the first bishop for the restored See. The Archbishop reserved his reply.

HERE, surely, is the climax of the pessimistic view of Painting: "I would," says Mr. H. Stacy Marks, R.A., "speaking, of course, practically, almost rather see my children take to crossing-sweeping than to Painting. Undoubtedly the greatest difficulty in the way of success is the enormous number of people studying to become artists. Competition is naturally becoming keener every year, and where one swims a large number must sink. . . . In my opinion there are too many Schools at the present time. Everybody appears to be trying to become an artist, and I'm sure I don't know how they will all get a living." Mr. Marks does not consider England an artistic nation. "The best singers and painters get high prices, it is true, but there is no 'rage' for Art as there is among the Italians." He does not think that genius always shows itself in youth. As for himself he says: "Although as a child I was always fond of drawing, there was absolutely

nothing I did in my boyhood which showed any promise of my rising above mediocrity."

RATEPAYERS of Bermondsey have protested against the action of the St. Olave's Board of Guardians, who want to build another new Workhouse at Rotherhithe. If built, this will be the means of sending up the poor rate by 2d., and that rate is already at the present time 4s. 7d. Dr. Cooper, L.C.C., moved a resolution protesting against the proposal. He said they were told it was to be a home of rest; that was impossible from the nature of the plan, which he had seen. Even if the Workhouse were necessary, said Dr. Cooper, it was the wrong time to begin it owing to the heavy rates. He maintained that the present accommodation was amply



[ASHBOURNE] CHURCH: SOUTH-EAST ANGLE OF MIDDLE STAGE OF TOWER: WM. WHITE, F.S.A.

sufficient for the needs of the district. The estimate was £64,000, but the Guardians had never yet built anything that did not exceed the estimate.

THERE is no foundation, it is said, and we trust the good news is true, for the alarmist reports circulated in London regarding the health of the President of the Royal Academy. In conversation with a Press representative, Sir Frederic, who looked very well, said he supposed that the alarming reports prevalent in London as to his health must have arisen from the fact that he was unable to attend the Academy banquet. It was his intention in the meantime to pass only one day at Algiers, but he would return for a stay of several days duration after visiting Setif and Biskra. His general health, the President added, was good, but he suffered occasionally from local attacks of gout. The

British Medical Journal says, we are glad to be able to state that the somewhat pessimist rumours prevalent concerning the cause of Sir Frederic Leighton's absence from his place as President of the Royal Academy at the recent dinner are happily much in excess of the facts. The heart affection from which Sir Frederic Leighton is suffering is one which necessitates abstinence from the excitement of public speaking and from all avoidable business, such excitement having proved to bring on distressing attacks. There is, however, good reason to hope that complete repose from all such functions and rest in a favourable climate will largely improve the President's health and general condition. We are very glad to hear of this, for we had heard, on usually unimpeachable authority, that the President's condition was, or had been, really serious.

ONE of the oldest Churches in Washington has a Steeple formed of a tree. The Church was built under the shade of a tall poplar, and an ingenious member of the congregation suggested that the tree should become the Steeple. Accordingly the poplar was deprived of its head, the bell being hung on the stump. This is, perhaps, the only instance on record of a Church Spire having been made from a tree.

IN Athens the excavations in the neighbourhood of the Pnyx and the Areopagus, begun by Professor Dörpfeld last season, have been continued. These excavations having shown that the ground in this region is full of buildings and antiquities, the Greek Government has expropriated the land. The work has been devoted to two main objects, the further tracing of the aqueduct found last year and the identification of some buildings known to have been situated near the Enneacrounos, in order to place beyond doubt the position of the Enneacrounos itself. Outside Athens, the excavations of the French School are being carried on with remarkable success. Several valuable discoveries have been made, amongst which may be mentioned the Treasury of the Athenians, which is covered with inscriptions (mostly official documents relating to Athens) and a large Archaic Apollo. As it is in Naxian marble, and bears the signature of an Argive artist, it will prove fatal to some theories about early Art. As many as forty inscriptions have been found in a day; the most interesting is the Hymn to Apollo, which has been performed at the French School. Some beautiful small bronzes have been found. At Delos many Roman houses were laid bare containing very fine statues, amongst them a copy of Diodesmus of Polyclitus, said to be the finest extant. The excavations conducted by the Americans at the Heraeum, near Argos, have been continued, and the magnificent foundation of the later Temple now stands bare. At Eretria, Professor Richardson, Director of the American School at Athens, has continued his excavations. The remains of the Temple and of the Altar of Dionysus have been found close to the Theatre. Excavations have been made by the British School on the site of the Temple of Apollo at Abæ. A good many Early Decorative bronzes were discovered. Both the German and French Archaeological Schools receive large annual grants from their respective Governments, and the American School is also generously endowed. The British School receives no regular grant from Government, and its income is a very small one. This is so characteristic.

A REMARKABLY fine Exhibition of the Art of Ancient Egypt has been organised by a

Committee of the Burlington Fine Arts Club. The Committee has received co-operation from many learned Egyptologists, including Dr. Fouquet, of Cairo; and many fine examples have also come, by permission of the Emperor, from the Royal Museum of Berlin. In thinking of Egyptian Art the ordinary person is concerned only with things of size—the pyramids, sphinx, temples, tombs, colossi at Thebes. Indeed, the casual tourist need not even go so far as this implies—Bloomsbury or Sydenham are enough to confirm his belief that the awe inspired by Egyptian Art is due to hugeness of scale. Such a belief would, however, be upset by a visit to the Art Club's rooms in Savile Row, where nothing larger than a mummy case—and only one of those—finds place, for the sensation evoked by this multitude of small things is one of respectful veneration, aroused by the sense of the antiquity of Art, and the longevity of the objects which are here to prove it. Nevertheless, the assigned dates can only be approximate, if not altogether supposititious, for there is a difference of 2,457 years between that given by Wilkinson to the first Pharaoh and that which Professor Flinders Petrie considers is correct—4,777 B.C. Paintings, pottery, glass, wood-carving, jewellery, scarabs, bronzes, stone, sculpture, textiles, bead-work, and ivory are here under the permissibly comprehensive title of Egyptian Art. Also there are many things—not the least beautiful or interesting—which reveal that, although Egypt was the parent of Greek Art, she took back more than she gave. But the pure Egyptian is classical and enjoyable, whether seen in the beautifully sculptured "Head of a King," lent by Sir Francis Grenfell; Dr. Fouquet's "Throne for a Divinity;" Mr. Hilton Price's Sixth Dynasty figures, carved in wood, of a priest and of a functionary; his very fine "Cynocephalons" silver spoon, pectoral; examples of the New Empire and Saitic periods in the Berlin case; the "Gold Necklace," lent by Lady Lampson, and Count Tyszkiewicz's *cloisonné* work, "Gold Soul," or necklace connected with earrings of gold and precious stones. Nor is the pottery section less fascinating, whether that from the Ancient Empire to the Roman times, or the brilliant blues and clear glazes of the Middle Empire.

It is probably known to few that on the north side of the Chancel of Holy Trinity Church, Stratford-on-Avon, there are the remains of the most ancient part of the original fabric, believed to be intact, but covered up with soil. The Vicar states that he is anxious to get some Archæological or Antiquarian Society to superintend the excavation, as it would be of interest to all if the remains, which comprise the ancient Charnel House, could be carefully and reverently uncovered. Existing records show that the Vault is built in the Saxon Gothic style, and there is every reason to believe that it is part of that portion of the Church erected at the time of Edward the Confessor. The Gothic doorway, within a few steps of Shakespeare's grave, opened into this building, which, says Ireland, "contains the greatest assemblage of human bones I ever saw."

THE repair of the steeple of Ashbourne Church (the "Minster of the Peake") completed with the exception of re-hanging the old bells in the Tower, was undertaken none too soon. The stair-turret and middle stage of the Tower (of earlier date than that above it) had opened considerably. The East and South walls of the upper stage, carrying the spire, had to be shoved up from the floor of the Church whilst the critical work of rebuilding this angle was carried on. Before commencing this work the opposite walls were bonded together (permanently) with two tiers of rods of "Delta" metal. This material is not only free from rust, but also from the dangerous expansion and contraction of iron. Of the spire the two lower stages were spreading, and there were large fissures

shall be available for their restoration to the Tower in which they could now be rung with safety. The work took three years in execution at a cost of very nearly £5,000. The greater part was carried on, without contracting, by Mr. Ralph Clifton as building foreman and clerk of the works. The architect was Mr. William White, F.S.A.

TWENTY-SIX thousand seven hundred and sixty-nine persons were at the first public view of the Champs-Élysées Salon. In the Salon the paintings most looked at, on the five franc day, were M. Detaille's Prince of Wales and Duke of Connaught, M. Bonnat's President of the Republic, and Munkacsy's "Crucifixion," which seems borrowed from the one which made the tour of England and the United States. There was more than usual interest shown in the sculpture. Patriotism is the fashion, and the best sculptors are this year patriotic. M. Batholdi's group, representing Strasburg succoured by Switzerland in 1870, was pronounced a masterpiece. Were it set up in the Tuilleries Gardens it would be hidden soon with wreaths and bouquets. All the Joans of Arc were admired. M. Falguière contributes a spirited and picturesque statue of Laroche-Jacquelin, the hero of the Vendean civil war, but M. Cordonnier's "Electricity" was the most admired work of all.

MR. J. W. WATERHOUSE, A.R.A., is mentioned as the probable successor to Mr. W. C. T. Dobson, retired Academician, on the Royal Academy. Mr. Dobson is entitled on his retirement to a pension of £200 a year. He will make the sixth retired Academician.

THE new Church at Crathie greatly interests the Queen. It will be formally opened during her Majesty's next residence at Balmoral. Princess Louise has given the church a splendid collection of polished marbles and pebbles from the Island of Iona, with which the granite Pulpit is ornamented. Several of the windows are filled with stained glass, the designs being selected by the Queen, assisted by Princess Louise and Princess Beatrice. The highly ornate Pulpit is a gift from "the Court."

SCREEN, DUNSTER CHURCH: SYDNEY NEWCOMBE, ARCHITECT.

extending to a considerable height on three of the angles. The top-stone and cap were also split by the expansion of the iron rod carrying the vane. This has now been constructed in the Delta metal. A great deal of stonework was injured or destroyed by the rusting of cramps and tie-bars, which had ceased to afford the requisite support. None of the old carved or moulded work was even cleaned, nor were the general surfaces touched. Large bonding stones were built in, and large quantities of concrete and cement were poured into the walls. Very nearly 5,000 cubic feet of new stone were nevertheless required. The height to the top of the vane is about 218 feet. The beautiful bells, eight in number—the veritable peal which inspired "those evening bells"—are hung temporarily in their old cage, brought down into the Churchyard till funds

We indicated its probability in a recent number, and now we are glad to announce that the amalgamation of the Surveyors' Institute of this country with the Irish Land Agents' Association, has at length been definitely decided upon. The matter was mooted years ago, but it was not till last week that the last of the numerous difficulties, owing to the different practice that prevails in each country, was overcome.

THE final series of Mural Decorations illustrating the Art of Music, have now been completed and placed in the Donaldson Museum. These paintings, which are presented by Mr. Donaldson, have been executed by M. Gaston de Vaere, who has enjoyed the privilege of having them submitted to the Prince of Wales, President of the College, at Marlborough House.

AN INTERNATIONAL SERIES OF ILLUSTRATED ARTICLES.

TO OUR READERS.

In our early numbers we hinted at our intention to introduce Illustrated Articles on current Architecture as a further feature in "THE BUILDERS' JOURNAL."

We have, therefore, pleasure in announcing that we have arranged for a series of

IMPRESSIONS

upon the Architecture of the chief cities of Great Britain and Ireland, of Germany, France, Italy, Spain and America.

These Articles will be finely Illustrated, and will appear in conjunction with "Our Men who Build" series, which we shall also make

INTERNATIONAL.

We shall be obliged if our readers will aid us in making these facts known.

IMPRESSIONS.

NO. I.—MANCHESTER.

THE NEW MEMORIAL CROSS AT PLYMOUTH.

STUDDER as England is with Mediæval Crosses of beautiful and graceful proportions, the new St. Andrew's Cross at Plymouth, designed by Messrs. Hine & Odgers, architects, of Lockyer Street, Plymouth, can well hold its own. In height it is taller than the majority; the Bristol Civic Cross at Stourton, Wilts, is only fifty feet high, and the celebrated Eleanor Cross, at Waltham, Essex, is but little higher. But the new Cross on the old burial ground, which on plan measures twenty-four feet square, is seventy feet high. It contrasts, in its light and beautiful outline, very happily with the old Western Tower of the parish Church hard by, whose bells once rang out when Drake and his ships dispersed the galleons of the Armada. It is in distinct contrast, too, to the Towers of the Municipal Buildings and Guildhall, yet there is an Architectural affinity and harmony in the whole group, which is striking and impressive. The base is of polished granite, surrounded by steps, octagonal on plan, of Plymouth limestone. The fabric generally is of carefully selected Portland stone. A red sandstone, raised in quarries at Mitcheldean, is introduced neatly in alternate layers, with most excellent effect. The Cross may be divided into three distinct tiers or stages. On each of the four faces of the first or lower tier, there is a moulded arch with double shafts and carved capitals. These recesses contain slabs of polished granite, on two of which are inscriptions. The legend on that on the south face reads: "Erected Anno. Domino, 1894. Ven. Archdeacon Wilkinson, vicar; John P. Paige, T. G. Greek Wills, churchwardens"; and on the northern: "To the glory of God, and in memory of parishioners during many centuries buried near this Cross." The central stage is treated somewhat similarly to the lower one, but is higher and it contains niches for statuary. At either angle are graceful pinnacles carved with crisp and effective crockets. Above are more pinnacles, and a crocketed spire of well considered proportions, terminating with a cross of wrought copper. All the mouldings upon this handsome structure are bold and thoughtful. The carved foliage throughout the fabric, which is exceedingly well done, is by Messrs. Harry Hems & Sons, of Exeter. In each of the four niches, resting upon a base carried by a polished granite column, is an allegorical Statue, measuring seven feet or more high. That on the south side is a particularly well considered one of Hope, with an anchor by its side. On the north stands Peace, wearing the crown; on the east, Faith, with the cross; and on the west, Charity, with an orphaned little one in her arms. The new boundary wall has also been designed by Messrs. Hine & Odgers, and its piers are effectively carved by Messrs. Hems & Sons. The handsome wrought iron work is by Messrs. Hardman & Powell, of Birmingham. The general contractor for all the works, now so nearly completed, is Mr. John Finch, Plymouth.

The Builders' Journal.

MEN WHO BUILD.

No. 13.

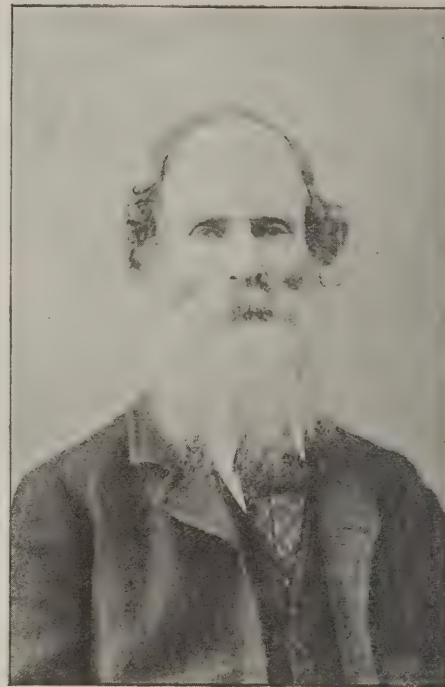
MR. WILLIAM WHITE, F.S.A.



WILLIAM WHITE, whose work is perhaps less known than that of any other architect of repute, might justly be considered a man of periods. Blakesley in Northamptonshire, knew him first seventy years ago. His father was a clergyman and intimate with the Scott family—of whom Sir George Gilbert Scott was the most renowned. Young White and Scott both made up their minds to devote themselves to Church work about the same time, and although factionists might not mention William White as the equal of Sir Gilbert, yet they have both achieved their object, and in these days that is something to be proud of. A Mr. Squirhill, of Leamington, was White's first master, from whom he acquired a general technical knowledge of his profession, and who left him to study drawing and "Art" as he pleased. Although from Leamington he came south and sat beside G. E. Street and Mr. Bodley, in Spring Gardens, he never imbibed the "knack" of making pretty drawings. After almost half a century of practice—forty years of which has radiated from his house in Wimpole Street, there is hardly a drawing in the place commendable to any known "process" of reproduction, and Mr. White has designed and built in his time no less than seventy Churches, and has added to or restored twice as many more.

The actual date of his commencement of practice was 1847, the first few years of which were spent at Truro, where he designed the block of buildings, consisting of the Bank and Solicitors' Offices, which occupy the site of the old Stannery Court,

and later the Bank of St. Columb. He built and restored many Churches in the county—those of Baldu, St. Gerrans, St. Hillary, St. Phillack, St. Petroc-Minor, Lamorran, and subsequently New Quay, Merifield by Torpoint, Anthony, and St. John's. Amongst



domestic work in the same county, he undertook the renovations of the ancient and interesting moated Rectory of St. Columb, for the Rev. Dr. Samuel Walker. Upon taking up practice in London, almost the first Church designed by Mr. White was that of All Saints, Notting Hill—the Church which was to have had the highest Tower and Spire in London. When the Tower itself had just been completed, a settlement made

its appearance owing to the authorities putting in a large drain within thirty feet of the foundations in the London clay, and work had to be stopped; and from that day not another stone has been added to the unfinished Tower, and over the bookcase in Mr. White's room are three out of the four silvered glass balls which were to have formed the finials of the pinnacles, the contractor of the work having got the fourth. It is a great pity that work was stopped on what would otherwise have been one of the very finest Towers and Spires in the country.

Between the years 1850 and 1860, the list of English architects who devoted themselves more especially to the building and restoration of Churches largely increased. Messrs.



PROPOSED WALL PAINTING OVER CHANCEL ARCH OF LYNDHURST CHURCH: WILLIAM WHITE, F.S.A.

E. Christian, J. Clark, S. S. Fenlon, and J. H. Hakewill, were amongst those who followed, with more or less tendency to individual peculiarities, in the footsteps of the late Sir Gilbert Scott, while a certain number of younger men, including G. E. Street, H. Woodyer, G. F. Bodley, and William White himself showed an early inclination to strike out in a new line for themselves. Mr. White has always been a great believer

to be prosecuted, as well as an art to be practised. As in all other Arts, there are confessedly abstract laws and principles in subjection to which they must be carried out, so we may naturally expect to find the same in Architecture. And as the scientific laws of each of these were discovered by a careful examination of the most masterly works of their respective Arts, so it is in the study of ancient buildings

great teaching of Burke, that the eye is not capable of determining whether any part of any determinable quantity be a fourth, or a fifth, or a sixth, or a moiety of the whole; or whether it be of equal length with any other part, or double its length, or but one half, it being a matter quite indifferent to the mind, and stands nearer to the question. "Surely beauty," said Burke, "is no idea belonging to mensuration, nor



ORIGINAL DESIGN FOR A CHURCH IN COURSE OF CONSTRUCTION AT BATTERSEA: WM. WHITE, F.S.A., ARCHITECT.

in proportion—in absolute scientific proportion—a perfection of design which finds little study and less favour in the present day. As far back as June, 1853, in a paper read before the Cambridge Camden Society, William White preached his doctrine. It is the neglect of the Science of Architecture which causes failure in modern design. It seems to have been almost passed over or forgotten that there is in Architecture a science as well as an art—a science

that we must look for a discovery of the scientific principles which ought to regulate the Art of Architecture; for it is in the investigation of these laws that the SCIENCE consists, the ART being simply the application of them, when discovered, to the practical purposes of correct design and beautiful form. Mr. White, therefore, believes in geometrical proportion worked out with as much rule as one would take out the bearing strains of materials. He does not believe in the

has it anything to do with calculation and geometry." All this William White does not accept. There is every reason to believe—he thinks—that whenever true Art was in any state of perfection, the artists *did* bind themselves down to the observance of certain fixed rules—rules that we call the conventionalities of Art. A Church worked out most minutely on Mr. White's principle of geometrical proportion, is that of St. Saviour's at Highbury, illustrated on another page.

On the drawings, and more so by glancing at the building itself, one would judge that the capacity of the Church was at least 800 to 1,000 persons, yet it is actually under 400, and Mr. White proudly considers the deception is due to the perfect proportions of the building. William White has built a great number of Churches in London. St. Mark's, Battersea Rise, St. Peter's, Plough Lane, St. Matthew's, Lavender Hill, all of which were for the Rev. Canon T. Erskine Clarke, and St. Marks, Hanwell; where also he built several houses in the Old English Cottage Style, one of which he occupied himself for a considerable period. Of country Churches there is no end, and he designed the Cathedrals of Madagascar

Warnborough, Hants, contains many mediæval brasses and tombs of the family, the most conspicuous of these being one to Sir Thomas White of Canterbury, with effigies of himself and his wife, and statuettes of their fifteen sons and six daughters—a goodly family indeed. Mr. White also claims kinsmanship with William of Wykeham, and being twice married, has a family of daughters and an only son.

It is William White's boast that every sheet of detail which has gone out of his office during the past half century has been done by his own right hand. Until the past couple of years every season has found him in Switzerland taking a hurried tramp through

SAWDUST.

THE appointment of surveyor to the White-chapel Board of Works is now vacant. The commencing salary is £400 per annum.

A NEW Grammar School is to be built at Shepton Mallet, also a Master's Residence at a total cost of £8,000.

A NEW Church, to be called St. Margaret's, is about to be built in Abel Street, a rapidly growing district of Burnley. It will seat 560 people, and the estimated cost is £5,000.

A NEW Baptist Chapel has been opened in Leamington Street, Blackburn. It has been erected under the recently inaugurated extension scheme of the Baptist Union. The cost of the new building has been £6,000.



DISTRICT CHURCH OF S. SAVIOUR, ABERDEEN PARK, HIGHBURY GROVE, LONDON

and Pretoria. His principal restorations have been Newland Church, in the Forest of Dean; Adisham, near Dover; West Wittering, in Sussex; Great Maplestead, Bletchley, Selborne, and Witham Friary, built by Hugh of Lincoln; together with the Rectory of Darlington, the ancient Palace of Bishop's Court, near Exeter, with its original Chapel; Tarporley Rectory, in Cheshire; and the old Manor House of Marshall's, near Edgware.

Of the social side of William White's long life there is not much to chronicle. His antecedents are perhaps best known by his relation to the family of the Rev. Gilbert White, of Selbourne. The Church of South

some part of the country and bringing back fresh vigour for his work, and now, at the ripe age of threescore years and ten, he does not hesitate to run up a suspicious pair of steps, and standing on the topmost rung remove from the walls of his interesting rooms in Wimpole Street the drawings you select to illustrate your sketch. In his long life this brilliant Church architect has done some splendid work, and when the century's Architecture comes to be detailed, William White's name will assuredly not be forgotten.

JAPAN is to celebrate its victories by an Eiffel Tower, erected, however, as a private enterprise.

A COMMODIOUS School Hall and Chapel have been erected at the Convent of the Holy Child Jesus, at Layten Hill, Blackpool, by Mr. J. Whiteside, from designs by Mr. R. B. Mather, architect.

APPLICATION is to be made to the Local Government Board for sanction to borrow £1,650 for the purchase of Cromwell House, for conversion into Offices for the Guildford Council.

THE Town Council of Burton-on-Trent propose to widen Little Burton Railway Bridge, and the approaches to it, at a cost of £5,000. It is also the intention of the Council to proceed with the widening of the Trent Bridge at an early date.

"TREILLAGE": TRELLIS-WORK.

MR. JOHN BELCHER'S PAPER.

THE fortnightly meeting of the Architectural Association was held on Friday night, at 9, Conduit Street. Mr. F. G. F. Hooper, vice-president of the Association occupied the chair, in the absence of Mr. E. W. Mountford, the president.

Mr. John Belcher read a paper on "Treillage." At the commencement he explained that he had selected this subject because it was a simple and suggestive medium by which he could obtain important and good effects in connection with gardens and domestic buildings. He then said: I do not propose to attempt, even if I were able to do so, any historical description of the gradual development of trellis-work. My object is to suggest its more extended use and recognition. I would point out that it has a poetical and romantic side as well as a useful one. Such a medium may be to the architect what clay is to the sculptor. It is the ease and facility with which daring experiments can be made which render it valuable. It can be altered and shifted at pleasure until the desired effect is obtained in a way which more solid and valuable materials prohibit. And it thus affords opportunities for judging effects which may subsequently be translated into stone or brick. To the student it presents the advantage of a material in which he can try experiments. He can buy a bundle or two of plasterer's laths and interlace them, and form panels and arches and many devices within a few feet of the back wall of his garden, which will increase its interest. And beyond all this, I think trellis-work itself is capable of being adapted to uses for which its nature and lightness render it suitable, while its decorative character must be recognised by every artist. In gardens trellis work is very effective. With the flexible laths, deep archways can be formed in the trellis division just long enough to form a dark frame beyond. Or if just a peep is required here or there, a few laths can be cut and a bent piece or hoop of wood, circular or oval, inserted, forming an unglazed window in the trellis or hedge. There is an example in the Penshurst garden. Again, should it be desirable that the upper part of a high screen, or parts of it, be more open or only partially hide what is behind it, then the trellis can be cut into pattern more or less open as desired—sometimes in panels, sometimes in a running pattern. Mr. Belcher gave instances of successful examples of trellis work, and mentioned particularly that in the garden of Mr. Alma Tadema, which was carried out some years ago by Mr. Brydon. Continuing he said: In trellis designs it is the solids and voids which must be taken into consideration. The interpretation of column and entablature into trellis-work is worthy of your attention. The "flutings" of the column are represented by the voids, and the "fillets" by the laths. In the lower part of the columns, to one-third of their height, there are "reeds" represented by circular rods. The laths and reeds are fastened to rings at intervals. The "Ionic caps," with their "volutes," are ingeniously managed. The introduction of the "triglyph" in this "order" is also amusing. Then a fret-work pattern is happily introduced in the fascia, and round balls at regular intervals in the bottom member. There are many other examples and variations. The construction of fences, arches, verandahs, and porches in trellis-work is exceedingly simple. In division fences the posts vary in thickness, according to their height and distance apart, and are frequently finished with some sort of terminal; a small fillet is all that is used to keep the ends of the laths in position against the posts. The top and bottom rails are often plain, the top having a projecting cover piece, or are sometimes moulded, and the bottom rail is kept well off the ground. The laths are arranged in several ways, and in larger or smaller meshes, as lightness or increased density is required. In garden fences the laths are sometimes interlaced, but more usually they are laid across each other, and pinned together in squares or diamonds. Other variations are obtained by doubling the lines of the pattern. When, however, in verandahs and porches, for instance, other geometrical forms are needed, they are made up of circles, curves, and radiating bars, mostly put together in sections,

though some of them are cut out, and form a species of fret-work. Instead of the ordinary thin lath, strips or fillets of greater thickness, ranging from $\frac{3}{8}$ in. by $\frac{1}{2}$ in. and upwards, are used when the pattern is very open. In many of the best examples of verandahs, we may note that the constructional timbers are reeded or treated with a hollow moulding to secure a light appearance. Small reeded columns are not unusual, and, indeed, form a very characteristic wood treatment of the period. The caps to such columns also are interesting, and some in form resemble a mushroom button. Garden seats with trellis work backs were very general in the last century. The backs, and sometimes other parts, were arranged in panels very similar to those on balconies. Such seats have been reproduced in many forms by Mr. Marcus Stone in his pictures. They are so excellent in design, and so ornamental to the garden, that a revival of the treatment may well be advocated. When oak is used in garden work the delightful silvery tint it gains with age is valuable. If the work is in deal then the dark green is most effective. For verandahs, &c., the dark green also tells well against a plaster or cement background, but when the brick wall is dark in tone then white or straw colour looks well. With regard to the use of trellis-work, which I have hinted at, I might say that amongst other ways in which its use might be developed is in internal domestic work. The staircase affords an opportunity, as instead of the ordinary baluster, some trellis pattern can be effectually adapted. Opportunity is also afforded to the County Council for the use of trellis-work in the erection of "band stands" in the people's recreation grounds. The pavilion designed by Sir W. Chambers is very suggestive and quite adapted to such a purpose. Light iron-work is too brittle, and is easily broken, whereas the wood gives, and even if a lath is snapped it is more easily repaired than ironwork. The garden seats and shelters also afford excellent opportunities for its use. In conclusion, he said, a well-designed piece of trellis-work gives to the substantial building to which it is attached something of that grace which is lent to garden Architecture by the natural growth of creepers.

A discussion followed.

The Chairman said he had been very much delighted with the paper and the exhaustive manner in which Mr. Belcher had handled the subject. He should make no remarks, but as Mr. Brydon's name had been mentioned in the address, he hoped that gentleman would open the discussion.

Mr. Brydon said he had long been impressed by the conviction that the only really good examples of treillage were rapidly disappearing from the scope and interest of the profession as architects. Mr. Belcher had referred to many fine examples of the laudable retention of it, as, for instance, the beautiful specimen in the house of Mr. Tadema. Yet its one great and, in fact, only merit, consisted in the fact that everybody could see exactly how it was done, and that the whole effect was got by judicious adaptation to catch the beautiful effects of natural light and shade. Its colour and effect were only to be obtained by years of fading and searing which resulted in the end in what the variable-ness and eccentricities of the English climate would do for it. Mr. Belcher had made reference to the inartistic treatment of garden seats. It was an absolute impossibility to get hold of a genuine old garden seat. They might think sometimes that they had got hold of one, an ideal one, but they had not. (Laughter). He had frequently made inquiries for such an article, but the answer was always No; the only way to get one was to design and build one. He knew of nothing more atrocious than the present-day libel on such a thing, with curved and uncomfortable angles and projecting knobs and joints. (Laughter). Garden gates, too, he thought offered a large field in which something could and should be done in the way of modifying them or going back to the antique and picturesquely beautiful in them. (Applause).

Mr. R. S. TAYLOR seconded the vote of thanks, and remarked that the glory of Treillage, whether of Egyptian origin or not, was fast going into a state of deplorable decay. It was no doubt from the Egyptian source that much or most of the present day finest

examples of the Art had emanated. He strongly recommended the study of the subject in its entirety to the members of the Association.

The CHAIRMAN in putting the vote of thanks said, it only remained for the members to follow up Mr. Belcher's suggestions. It could easily be done. To see beauty in common things, and to make others see it and take interest in it, was part and parcel of their common function in following their profession.

Mr. BELCHER, in reply, said that when he undertook the subject he had expected to find any amount of data to work upon, and any number of works to refer to, but he had been disappointed, for he had found absolutely next to nothing upon which to found his remarks. His ideas and suggestions had consequently to be derived from and built up upon really personal observation. He had found it a most interesting study, and believed they all would, too, if they took it to heart as he had done, in the interest of their profession.

Mr. BELCHER then explained the illustrative and technical features of his essay to the members, and the meeting terminated with the usual vote of thanks.

THE WORK OF THE INSTITUTE.

A CLASS OF "CRAFTSMEN."

THE members of the Institute considered the report at their annual general meeting, Mr. F. C. Penrose presiding. The report was in great measure a *resumé* of the year's work, and as such had been reported concurrently. From it we learn that the Fellows now number 604, and Associates 921. During the twelve months five Fellows (who were previously Associates) and 91 Associates (19 of whom were previously Students) have been elected. Three Hon. Associates—Alfred Gilbert, R.A., F. G. Hilton Price, director of the Society of Antiquaries, and W. B. Richmond, M.A., A.R.A., have been elected; and six Hon. Corresponding Members—Charles Buis (Brussels), Bar Fereé (New York), Alois Hauszmann (Budapest), Henri Edouard Naville (Geneva), Emerich Steindl (Budapest), and Louis Viollier (Geneva). There are now 61 Hon. Associates and 55 Hon. Corresponding Members. The number of Students has increased to 143, as against 101 at the corresponding period last year, and the number of Probationers to 736, as against 577 in 1894. The Art Standing Committee reported that, in view of the fact that one, or possibly two, important new bridges across the Thames at Vauxhall and Lambeth were in contemplation by the London County Council, they had given special attention to the matter, in order to secure structures worthy to rank with Waterloo and London Bridges. Although the Committee regretted that their endeavours to secure stone structures had been unsuccessful, they desired to record their sense of the courtesy and attention with which their views had been received by the Bridges Committee of the London County Council. The Council, having appointed a Committee to consider the question of the Hon. Associate class, has approved in principle the establishment of an additional class of members who shall be craftsmen in the Arts allied to Architecture; and have referred the matter back to the Committee to work out. The Council hope, before the close of the Session, to bring forward a scheme for the consideration of the Institute. The Preliminary Examinations of November, 1894, and March 1895, were held in London, Bristol, and Manchester, and the 217 successful candidates have been registered as Probationers. The Intermediate Examinations were held in London on the same dates, when fifty-seven Probationers passed, and were registered as Students. Examinations qualifying for candidature as Associates were held during the week commencing November 26, 1894, in Manchester, Bristol, and Glasgow, when sixty-four passed. The first of the Final Examinations qualifying for candidature as Associates was held in London and Manchester, from March 29 to April 6, 1895, when out of the eighty-six applicants who attended twenty-six passed. The Council again tender the thanks of the Institute to the Board of Examiners for the arduous services rendered by them, and to the allied Societies at Manchester, Bristol, and Glasgow.

SHOULD GOVERNMENT ENCOURAGE ART?

AT the Academy Dinner, Lord Rosebery spoke of a national duty to painters and sculptors, in the spirit of a man conscious of a vast debt which he has never yet had a chance of paying. As "an irresponsible dreamer of dreams," he weighed in the balance, not the present Government only, but all Governments in our country, and found them wanting. What had they done to encourage Art as she deserved? They had bought a few pictures when their authors were dead; they had commissioned a living sculptor to execute a Statue of a deceased statesman; they are in the habit of giving commissions to a few architects for the erection of public buildings—with results not always as happy as could be desired. Lord Rosebery was careful to disclaim any official authority for his critical attitude; but, in effect, he was repeating Carlyle's vigorous diatribe against those marble presentments of notable men in our squares and public thoroughfares, which seemed to him to be like "grisly undertakers waiting to bury the lost spiritualisms of mankind." It is extremely pleasant to find that Lord Rosebery, speaking not as the head of Her Majesty's Administration, but as a dreamer who sees at the foot of his bed that beautiful apparition of an ideal Art to which he extends his yearning arms, can frankly tell us that we ought to commemorate our national annals by the aid of contemporary pencils and chisels, and deck the walls of Parliament "by giving orders to living painters to paint living men."

VERY interesting is the discovery reported from the Department of the Drôme. During the construction of a railway from Nyons to Pierrelatte some remains of a Gallo-Roman town have been revealed to view in the neighbourhood of Saint-Paul Trois Châteaux. According to the account which reaches us the town is thought to be that of Tricastina, which was very ancient, and of some note at one period. All the mosaics, pillars, black and white marble tiling, bas reliefs, and porcelain hitherto found were covered with a layer of ashes, which leads to the presumption that the town was destroyed by fire.

THE Warwickshire County Council has decided to accept Mr. Jeacock's tender of £1,283, being the lowest of six tenders, for the erection of a Police Station at Erdington. The County Surveyor has also been instructed to prepare specifications for the new Lock-ups at Castle Bromwich and Earlswood, and to invite at least six tenders for each building.

MR. GOURLAY'S Architectural and Building Classes, to the number of over 100, took advantage of the opportunity of his appointment to a Professorship of Architecture and Building Construction in the Glasgow and West of Scotland Technical College, to present him with a very handsome oak writing cabinet.

MUNICIPAL ENGINEERS AT BRIGHTON.

THE Incorporated Association of Municipal and County Engineers visited Brighton on the 4th instant. The members assembled in the Royal Pavilion, where, after being greeted by the Mayor, they settled down to the consideration of several papers. Mr. Francis, the borough engineer, gave a description of Brighton and its municipal works, including the sea-front improvements, the drainage system (which, by the way, is being extended by Messrs. B. Cooke & Co., of Battersea), and the condemned areas. The large site of Cumberland Place is being cleared for the erection of houses for the artisan classes. Other works, for which tenders will shortly be invited,

Britain. Mr. Johnston, C.E., the Corporation Waterworks engineer, gave a description of the sources of water supply and distribution in Brighton. The members subsequently inspected various works in the town. One point the Association might bear in mind at the forthcoming meeting in Cardiff: However great the merit of a paper may be, greater personal advantages accrue to members by expressions of individual opinion and experience upon the subject touched upon in the paper, than by simply hearing the paper read and having, either no discussion whatever, or a discussion of a superficial character.

It is stated that the Count and Countess de Castellane (née Gould) are preparing the plans for a sumptuous residence in the Avenue du Bois de Boulogne. A large site has been secured at the corner of the Avenue Malakoff, at the cost of 700 francs per metre. The American Countess will now carry out the dream of her life, and a considerable portion of Mr. Jay Gould's money will be spent in an exact reproduction of the Grand Trianon of Versailles, surrounded by spacious gardens. M. Samson is the architect chosen to carry out this elaborate work.

MR. CHARLES MASON, who was telling the Society of Engineers one evening last week, how to make street subways, is the responsible Vestry surveyor to the Parish of St. Martin-in-the-Fields. Thirty-five years of age, and one of the handsomest municipal engineers on the planet, he might be taken at the first blush for a popular tenor star. Instead of this he is one of the soundest authorities in London on the disposal of house refuse.

THE great Beacon Light now being set up on Fire Island, just off New York, will be the most powerful light in the World, the lens increasing the power to 250,000,000 candles. To ships out 100 miles at sea it will be visible—not the light itself, on account of the curvature of the earth, but the flash on the clouds.

BROMLEY, one of the most poverty-stricken parts of London, is about to be furnished with a new centre for social work. The other

day the foundation stone of a new Hall in connection with Blackthorne Chapel was laid with much *éclat*. The Hall will accommodate 800 persons, and will be used as a centre for all kinds of social work. It will cost only £3,000, about £800 of which still remains to be provided.

At a meeting held at Wesley Chapel, Accrington, a scheme of enlargement of the premises, which will involve an outlay of £1,600, was accepted. Subscriptions have been promised amounting to £300.

THE Aberystwith Town Council propose to borrow £13,000 for the following purposes:—Sea Wall £10,000, Town Hall £2,500, Electric Lamp Pillars £900, and Lavatories and Urinals £350.



THE RYLANDS' MEMORIAL, MANCHESTER: MESSRS. HEATHCOTE AND RAWLE, ARCHITECTS.

comprise the extension of the existing Colonnade and Terrace, the building of a Sea-wall, one new concrete Groyne, and other works. The Municipal Buildings Improvement Scheme, Technical Schools, and alterations and extensions of the buildings on the Pavilion Estate, so as to form a new Free Library and Reading Rooms, Museums and Picture and Art Galleries, are matters under contemplation. Mr. Arthur Wright, the electrical engineer and manager of the Corporation Electricity Works, discussed some points of interest in the development of electric supply at Brighton. The remarkable feature of this electric light station is that, exclusive of redemption and interest, the actual cost of supplying electrical energy in 1894 was only 2.3d. per unit, being lower than that obtaining in any other central station in Great

THE FIRST SCHOOL OF ARCHITECTURE IN ENGLAND.

OPENING AT LIVERPOOL.

THE Liverpool School of Architecture and Applied Arts was formally opened on Friday last, although it has been in vigorous informal existence for six months and has already close upon 100 students. But though the School has thus rapidly advanced in its development, its growth has gone on so quietly that people interested in the matter in a general way remain under the impression that as yet it exists only as a scheme on paper, and as the cherished craze of certain Art enthusiasts. The facts, however, are all the other way; the first School of Architecture and Applied Arts in England is hard at work. Without doubt, the credit of having conceived the idea of the School belongs primarily to Alderman Rathbone, who is a unique figure in municipal life. Of what value is the new School as a step in the desired direction? The question is best answered by considering briefly the aims which Professor Simpson, the director, and those associated with him, have set themselves to achieve. These aims are three in number. First comes this one: "To effect a complete union between the different Arts and Crafts." This sounds at first rather vague. In truth it is not so, and none are more aware of its importance than those who have any association with the Arts. Painting, Sculpture, Architecture, Decoration, Artistic Craftsmanship, isolated from one another, as they are, unfortunately, at this moment in England, are mere sport and pastime, outcome of the public uncertainty, which is the surest evidence that a reasonable and cultivated taste is absent. United as they are, on the other hand, in France, they exercise upon one another a healthy and invigorating influence, creating a common atmosphere favourable to free and natural development, and conducing to the growth and conservation of public judgment on right lines. To effect a complete union between the Arts and Crafts, so that painter, sculptor, architect, decorator, craftsman, may be animated by a common spirit in pursuit of a common end, is therefore a great and a necessary aim. The second of the three objects is to establish a thorough course of training for students in the different Arts, and especially in Architecture, Sculpture, and Decorative Painting, and the third to provide special instruction of an advanced kind for skilled craftsmen and artisans, chiefly in those crafts allied to Architecture.

The School began last October with the resources of the Roscoe Chair of Art, plus a grant of £1,000 per annum from the City Council out of the Technical Instruction Fund. But it was homeless, and had it not been taken in by University College would have been in almost as bad a way as the School of Science and Technology. At University College Professor Simpson, the director, has an eyrie at the top of the Victoria building, which is also the Architectural studio—an excellent room lighted from the roof, and with no disadvantages except its altitude from the street. Those students who go in for Architectural Modelling put up with a part of the old building near the Medical School, which was used for a time as a temporary infirmary. The wood-carving, again, is carried on in the annexe of the engineering laboratories, and the Painting, Sculpture, and Metal-Work students find a home in a one-storey wooden building of fair dimensions, built specially for their accommodation. In a capacious studio, furnished with casts from the antique, mingled with busts and figures modelled by students from the life, and in every stage of advancement, Mr. Charles J. Allen directs some thirty students of Sculpture and Modelling. Here, also, in the adjoining studio, Mr. R. A. Bell teaches Decorative Painting and design by studies from life and the antique. The Metal-Working department is under the direction of Mr. J. Platt, whilst the Wood-Carving is taught by Mr. F. G. Floyd.

The staff of the School consists of the directors and these four assistants, but other instructors, it is hoped, will shortly be appointed. The details of work already mapped out appear to be on right lines. To take the Architectural department, the course of studies is arranged

to meet the wants, first of students already engaged in architects' offices as pupils and assistants; and secondly, of those who desire a course of Architectural training before entering the profession. The latter feature may be emphasised, because the architect's assistant's usual experience is two or three years' copying or tracing, as a result of which he gains by degrees a certain practical facility in drawing up plans and designing elevations which meets ordinary professional needs. The case, however, would be different if he began the work with some appreciation of Architecture as a Fine Art, and with some love for the pursuit of it as a study. It is here undoubtedly that the influence of the School will be felt. In entering upon his course at the School, the student studies the history of Architecture with systematic reference to the features and ornament of each particular style. He has also his attention directed to building materials, their strength and application to design, since it was along this path that Architecture advanced. Finally, he engages in studio work, copying either approved designs, or drawing from and modelling casts. In the following year he studies elementary design and construction in a practical way by drawing and modelling, and if he pursues his studies during a third year, is carried to the most advanced principles of construction and design. In the Sculpture and Modelling studio modelling is done either from the life or from the antique or casts. The design and modelling of ornament is also carried on. Decorative Painting is necessarily chiefly taken up by advanced students. A word may be said with reference to Decorative Painting. As sometimes used the term is made to apply to easel pictures with certain peculiarities of style. But Decorative Painting proper—painting which, like the Italian fresco paintings, is designed as an ornament and completion of Architecture, lending appropriate grace and dignity to interiors—is based upon definite principles of its own. Except at this Liverpool School it is, however, nowhere taught in England, though there can be little doubt that it is destined to be one of the most important developments of the Fine Arts.

The School has besides these departments a popular crafts side, which is of importance. Evening classes are held in modelling from the life; modelling from the antique, and modelling architectural ornament; decorative design, drawing from life, carving in stone, marble and alabaster; wood carving and wrought iron work. The fees for admission to the evening classes are (except life classes) 10s. per term; but artisans are admitted at half fees. The latter regulation indicates the spirit in which the School is directed. It is satisfactory to note that in connection with the School there are twelve free evening studentships open to competition, and it is to be hoped that at an early date scholarships will be established enabling students from the evening classes to pass the day classes. The students now enrolled include architects, painters, sculpture apprentices, pottery painters, lithographers, glass painters, engravers, furniture designers, decorators, wood carvers, plasterers, stone masons, and smiths.

INAUGURAL ADDRESS BY MR. T. G. JACKSON, A.R.A.

"BUILDING WELL AND BUILDING BEAUTIFULLY."

Mr. T. G. Jackson, A.R.A., said there were associated with Architecture two vital misconceptions. The first was that Architecture was mere ornamentation—something that was only skin-deep, and simply a matter of expense. The second was that it applied only to Town Halls, Churches, and the like, and not to ordinary buildings, in the same way that a carriage and pair or a footman and butler were out of the reach of ordinary people. If those ideas were true, Architecture would not be in the true sense an Art at all; it would not be Art applied, but misapplied. But these ideas were wholly false. Architecture was not the art of tricking out a building with ornamentation; it was the art of building well, and, at the same time, building beautifully. It was nothing but good construction, inspired from first to last with artistic motive. Ornament was not a necessary part of it; often ornament was

far better left out, for ornamentation was one last resource of the incompetent architect. As one of their own professors had put it, when a man could not design, he fell back upon ornament. Nor was expense a necessary part of it. Many of our buildings would have been better if less had been spent on them. On the contrary, no building was too humble for Architectural treatment, and Architecture was no more a luxury than was virtue. The true architect built plainly where it was necessary, splendidly where there was need for dignified expression, but always basing design upon construction, always adapting effect to the occasion, and by cheerfully obeying constructive necessities from first to last, shaping and adapting forms suggested by construction into beautiful and harmonious combinations. Thus Architecture inspired building with the artistic motive from the laying of the first brick to the driving of the last nail. How was the good architect to be made? A true artist worked unconsciously in a good way, and produced a good thing. They might set another man to do the same thing, but the result would not be beautiful. The artistic instinct was born with a man. There were those who had none of it; others, most of us, who had enough to enjoy the works of artists; others who had the instinct of beauty so strong within them that they could not help giving it expression either in literary composition, or Music, or by what were called the Fine Arts. But though a man might be born with this instinct it was worth little without study and instruction. A man might be of the right material to begin with, but training was necessary to enable him to use his gifts, and to shape him into an artist. These considerations appear to him opposite on such an occasion as that then present. Their School was an experiment, an interesting experiment, the result of which would be waited for with anxiety; but, experiment though it might be, experience was not to be overlooked by those who had the direction of it. In this connection he desired to refer to the comparative values of training architects by the apprenticeship system, which in their case still survived; and by scholastic teaching. He laid stress on the former. There was nothing like real work, the practical work of an office, for enabling a youth to acquire knowledge with rapidity. But although he held that no school training could be substituted for apprentice training, he was far from saying that the latter could give the student all he would require for his career. It needed to be supplemented in a thousand ways, which the student must discover for himself, and such a School as that would be of infinite service to him. One of the results of the modern method was that it shut up the student in the architect's office. This isolation of the architect was a matter of comparative recent date. In former days it was not so. If they wished to know how the great masters of old accomplished their art, they must picture to themselves a very different system to that which was in vogue to-day. They would not find, as now, the architect sitting in his easy chair in his private office receiving his clients, and surrounded by his clerks and draughtsmen; but a much humbler picture would have to take its place. They would find the architect with his tools in his hand, amongst his own workmen, and in his shirt-sleeves, providing he possessed a shirt. These Old Masters were nothing more than workmen, for they not only designed the work for their assistants, but also worked manually in bringing that work to a successful completion. Thus, whereas the modern architect resembled the professional man, and designed his buildings on paper, and only visited the scene of operations from time to time, the old architect lived on the building, and designed it with his own hands. The advantages of the old method over the modern were obvious, since Architecture and Sculpture depended upon the right use of material no less than a right principle of design. Under the present system the architects were too often more in the position of learners than of teachers. They had workmen under them who knew how to do work better than they themselves did. They had to design without ever having held an instrument in their hands. The consequence was that they often set men

to do things in difficult and roundabout ways which might have been done much better. All this resulted from the fact that architects were trained on paper, and as long as that was so they could not hope for anything better. It was important that they should face the fact, and see what could be done to remedy it. If every young architect were made to spend a year or more in a mason's yard working as a mason, original ideas would be formed which could not be got in any other way, and this would save him from those mistakes in the construction of material which so disgraced the modern practice. He hoped this would form part of their work at University College, or that arrangement could be made with master builders to open their yards and workshops for the reception of students, and he trusted those master builders and members of the Building Trades' Federation who occupied seats on that Council would give effect to the suggestion he had made. There was another evil in shutting up students in an architect's office, and that was that it kept them away from the study of the sister Arts. The consequence was that when occasion arose it was impossible for artists unacquainted with each other to produce harmonious results. Architecture was the art of building on a grand scale, as sculpture was the art of building on a small scale, and of all the Arts these two were the least separable. It was most essential, therefore, that these two should be trained alike, and a happy consummation attained as in the older times, when the same man could work in each. There in that School they had a ready remedy, for they proposed to carry on instruction in the three great Arts, and they might thus easily gather the students together. It was necessary that every architect should pass through the Modelling School, where he would learn to accomplish in concrete form what was to be done in buildings, and in the same way he would have every young sculptor trained in the School of Architecture, so that he might learn to deal with work on a large scale, and that which lay more in the field of Architecture than Sculpture. It was not, however, only to the sculptor or to the painter that they would throw open their School of Architecture, but he trusted that it would be open to all concerned in building, of whatever degree. It was essential that builders should take some Architectural training in order that their work might be turned out in good taste, and he trusted that the students at that School would be largely made up of builders as well as of architects. In conclusion, Mr. Jackson said the scheme which the Liverpool School of Architecture and Applied Arts had in view was one which every true son of Art would, from his heart, wish a successful issue, and which, if it succeeded, could not fail to have an abiding influence on the history of Art in England. In the evening a banquet was held.

THE Crewe Town Council has accepted the design of Mr. James Stevens, F.R.I.B.A., of Moseley Street, Manchester, for a new Art School and Women's Institute, and has placed the work of carrying out the scheme in his hands. The building is to cost about £5,000.

THE Princess of Wales has kindly lent her collection of photo-ceramics to the Exhibition of Photography, which opened at the Imperial Institute on Saturday last; and the Princess Victoria of Wales has contributed to the Artistic Section photographs which she has taken.

THE Local Government Board disapproves of the proposal of the Health Committee of the Halifax Corporation not to carry out the scheme of a new small-pox Hospital, the erection of which is estimated to cost nearly £20,000. Borrowing powers had already been obtained.

CLASS Rooms have recently been erected in Guinea Street, Redland, Bristol, which completes the block of buildings commenced six years ago. Mr. H. C. M. Hirst, A.R.I.B.A., is the architect, and Messrs. Lowe and Waite are the contractors. The block now consists of the Hall erected in 1889 at a cost of nearly £2,000; the Soup Kitchen and Offices built at a later date at an outlay of nearly £300; and three Class Rooms just finished at an expenditure of £1,000.

SOCIETY MEETINGS.

Liverpool Architectural Society.—On Monday evening, May 6th, the annual meeting of the Liverpool Architectural Society was held in the Law Association Rooms, Mr. Henry Hartley, F.R.I.B.A., presiding. The annual report stated that the Society numbered 129 members, as compared with 130 at the close of the previous year. The Committee expressed regret that the new School of Architecture had not been so well attended as had been hoped at first. The receipts amounted to £110 15s, and there was a balance in hand, after meeting expenses, of £7 7s. Mr. A. B. Culshaw was elected president for the next session. Messrs. H. W. Keefe and J. Woolfall vice-presidents, Mr. J. W. Blakey librarian, Mr. James Dodd treasurer, and Mr. Henry L. Beckwith secretary. Mr. Hartley in bringing the proceedings to a close, thanked the members for the assistance which they had rendered him during the period he had occupied the position of president. The most important event which had taken place during his period of office had been the establishing of a School of Architecture and Applied Arts, and the appointment of Professor Simpson to the chair of Architecture of the University College (applause). He congratulated the Society upon the fact that Liverpool was the first centre which had taken upon itself to establish such an educational work. He also congratulated the profession generally upon the accomplishment of a scheme which had been so long desired and so long looked forward to—namely, the formation of such a School as a great centre from which would spring new life and greater vigour in the development of Art by the systematic training which their younger members could now obtain. The School was dependent entirely upon the way it was supported and made use of by those for whom it had been specially created.

Edinburgh Architectural Association.—At the recent meeting of this Association held in the Royal Institution, Mr. John Burn read a paper on Plumbing, and in the discussion which followed, the vexed question of safety-valves for kitchen boilers came largely to the fore.

Glasgow Architectural Association.—The general monthly meeting of this Association was held on Tuesday evening in the Rooms, 114, West Campbell Street. Mr. Wm. Tait Conner, A.R.I.B.A., vice-president occupied the chair. Mr. David B. Dobson read an essay on "Decorated Gothic," illustrated by lime-light views and by a number of diagrams, plates, &c.

Society of Engineers.—At a meeting of the Society of Engineers, held at the Westminster Palace Hotel, Westminster, on Monday evening, the 6th of May, 1895, Mr. Wm. George Peirce, president, in the chair, a paper was read by Mr. Charles Mason, Assoc.M.Inst.C.E., Surveyor to the Vestry of St. Martin-in-the-Fields, Westminster, on "Street Subways for Large Towns." The author, impressing the importance of an improved method of underground construction for the reception of the numerous mains laid beneath the streets, stated that the subject was one requiring the immediate and serious consideration of all engineers to public authorities, gas, water, electric light, and other companies. Further, the difficulties experienced in making periodical examinations of the mains as to leakages and repairs (as the recent explosions in the Metropolis prove) has imposed a duty upon those having the control of the streets to devise some better means whereby the safety of the public is absolutely secured, and the life and cleanliness of the pavements materially benefited. The present system of leaving disused pipes beneath the streets was strongly condemned, as materially adding to the risks to those using the streets by reason of probable accumulations of gas therein. Interesting statistics were given, showing the enormous annual cost of opening up the pavements for examination, and repairs to the various mains. The various powers conferred by Acts of Parliament upon local authorities and bye-laws made thereunder, together with the objections on the part of the owners of the mains to using the subways, were fully explained, the author stating that where subways did not exist, municipalities lost to a certain extent the control of the streets. The author, in

explaining the construction and uses of existing subways both in the provinces and the Metropolis, pointed out the chief difficulties in the way of their general adoption as being the question of light and ventilation, and cost of construction; also in his opinion, the "single" system was open to objection, as the mains having to be placed on one side of the subway, compel the supply pipes to be taken across the same for supplying premises on the opposite side of the street, thus blocking the passage way and causing obstructions in the flow of the pipes themselves; the difficulties of sewer ventilation were also referred to. The author proposed "triple" subways having a central avenue for trunk mains, and side avenues for subsidiary or service pipes, vaults being provided beneath the footways remaining the property of the public authority and leased to the adjoining owner, thus providing some return for the outlay. A detailed description of the method of construction was given, with an estimate of the cost shewing a profit based mainly upon returns of the rentals derived from the vault construction and charges for those using the subway; the saving which would accrue in keeping the streets free from obstruction unfortunately could not be reduced to figures on the credit side although the saving to life and rolling stock would be very great; immunity from frozen pipes due to a uniform temperature in the subways was instanced as an argument in favour of subways. The author in conclusion strongly urged the desirability of obtaining powers whereby the whole of the subsoil of the streets should remain the property of the authority, and although not directly advocating the municipalization of all gas, water, and other companies, expressed the opinion that such a course from a municipal point of view would cause far less inconvenience than now arises to the public using the streets. Finally, the subject was one of a very controversial nature, but in spite of all obstacles some form of the triple subway should be adopted universally in all large towns. The paper was illustrated by diagrams which were fully explained by the author.

Institution of Junior Engineers.—At a meeting of this Institution held at the Westminster Palace Hotel, London, on May 3rd, the chairman, Mr. H. J. Young, presiding, a paper on "The Warming of Buildings by Hot Water" was read by Mr. Ernest King, Wh.Ex., and Mr. Kenneth Gray. The subject was treated in two divisions, the first dealing with the low-pressure system, and the other with that of the high-pressure. The authors having stated the theory of circulation and mode of determining the motive force in a hot-water apparatus, proceeded to deduce therefrom the best arrangement of the mains and pipes. Passing on to the high-pressure system its leading characteristics were brought forward, special mention being made of the pipe joints, boiler coil and pipes, and the various ways of circulation. The relative merits of the low and high-pressure systems were investigated, from which it appeared that the former was more advantageous. The paper was illustrated by a very large number of diagrams, specimens, etc., and an interesting discussion followed, in which Messrs. E. Berry, H. Parsons, Z. King, F.R.I.B.A., P. Griffiths, Loftus Perkins, W. B. Clarke, W. G. Walker, A. S. Arundel, H. E. Duncan, B. T. King, and Shephard took part.

Liverpool Engineering Society.—The annual meeting of the Liverpool Engineering Society was held on Wednesday last in the Royal Institution, Colquitt Street, Professor H. S. Hele Shaw presiding. Mr. Arthur J. Maginnis was elected president for the next session, Mr. W. S. Boulton librarian, Mr. C. S. Pain hon. treasurer, and Mr. R. C. F. Annett hon. secretary. The annual report, submitted by Mr. Annett, stated that when they started in 1876 they had only 51 members, but at the close of last year they had 274, being an increase on the previous year of 27 members. A paper was read by Mr. J. Reney Smith, entitled, "Engineering Work and Operations at Perim Island."

A HANDSOME marble Memorial Tablet to the late Lord Bowen has just been placed in the Vestibule of Lincoln's Inn Chapel by the benchers of Lincoln's Inn. The Tablet has a laudatory inscription in Latin engraved on it.

THE COUNTY COUNCIL AND ITS ARCHITECT.

MR. BLASHILL'S CRITICISM OF THE WORKS COMMITTEE.

THE conflict between the Architect's Department and the Works Committee of the County Council reached a further stage when Mr. Blashill, the architect, replied to the criticisms of Mr. Holloway, the manager of the Works Department. Mr. Holloway placed the responsibility for part of the excessive cost of the Yabsley Street Dwellings and the West View Cottages on the architect, who was too rigid in his examination of the material, seeking a higher quality than it was easy to obtain. Mr. Blashill replied that he did not want to be made responsible for the materials and workmanship of the Works Department. His advice was not taken, however, and the "Progressional officers of the Council found themselves charged with the very difficult and delicate responsibility of supervising the operations of one of the most important of the Council's Committees. To add to these difficulties the Council determined to keep up a strict comparison of its own operations with those of contractors." Mr. Blashill remarked that all his specifications were prepared with a view to the work being carried out, if necessary, by contractors. He reminded the Council that

of the excessive cost of labour. A very large proportion of this excessive cost was really due to the delay in the purchase and delivery of particular materials and to the purchase from different makers of the several parts of the same fitting, which parts when brought together could only be adapted by altering them on the job. A good deal of material was actually sent down to the jobs which was not wanted there at all. I have no means of knowing whether this has been charged to these jobs. A good deal of work was executed in spite of my warning that it was being wrongly done, and no doubt the cost of making this good is charged to the job."

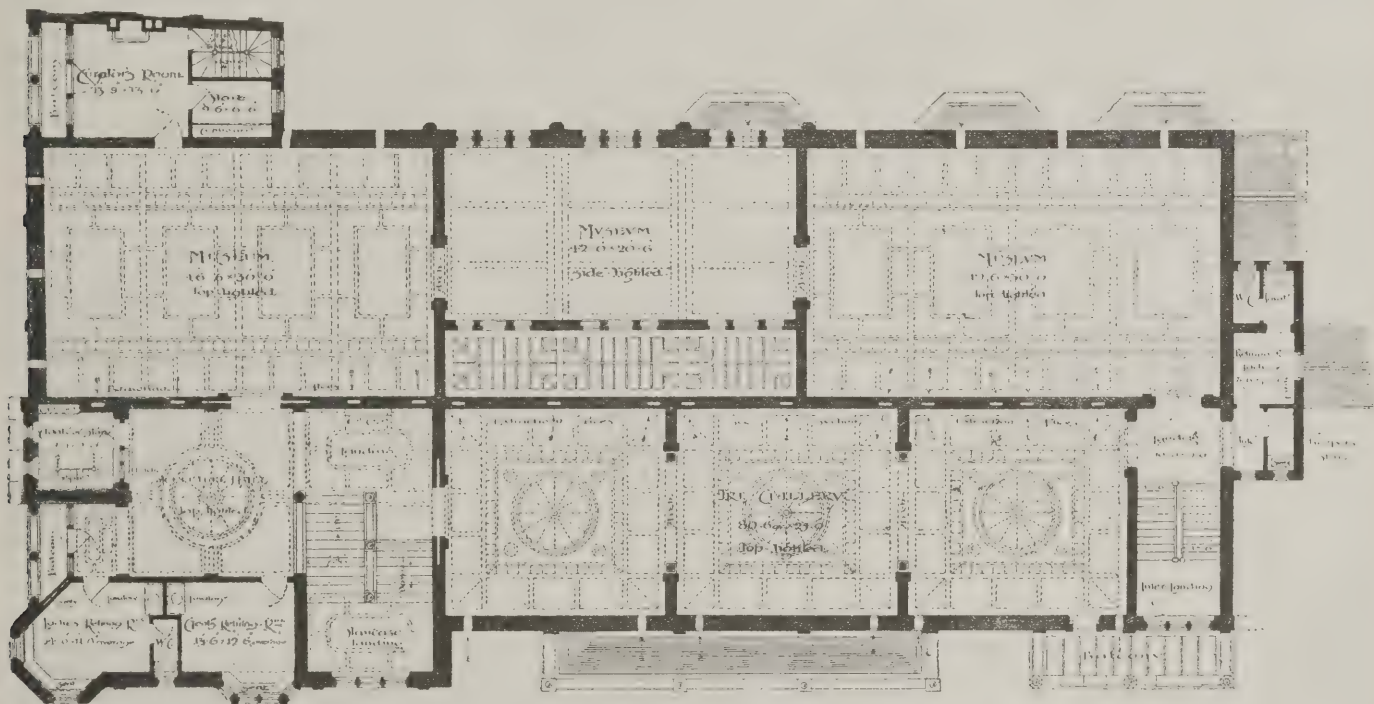
THE NEW GENERAL POST OFFICE.

THE pile which has just been erected in St. Martin's-le-Grand is another testimony to the continual growth of postal business. The new building will be known as the General Post Office North. It occupies a site on which formerly stood the Queen's Hotel, the French Protestant Church, the old Money Order Office, &c., and covers an acre and a quarter of ground. The site alone cost over £326,000, and the building will cost at least £200,000 more. The shape of the General Post Office North is described as irregular, one front being considerably larger than the other. The

which will be used for storage. The structure will, it is calculated, accommodate altogether about 2,000 persons. The Post Office has always been careful of the comfort of those it employs, and this fact has not been overlooked in the new building. On the top floor provision has been made for kitchens and refreshment rooms, where members of the staff can, if they choose, have their mid-day meal at a cheap rate. In a pile of such dimensions, getting to the top of a staircase is no joke, so the various floors will be connected with lifts, worked on the most approved principles. On the roof is a Tennis Court, which in the lunch-hour will, no doubt, be fully utilised. Altogether the General Post Office North is one of the largest, handsomest, and best appointed public buildings in London, and is one of which its architect, Mr. Henry Tanner, Surveyor of Her Majesty's Board of Works, may feel proud.

ART IN VENICE.

AN Art Exhibition in Venice strikes one, at first, as a superfluity of æstheticism, since Venice itself has long been, and must always remain, while it contrives to keep its head above the waters, an Exhibition of Art, such as Rome or Florence alone can rival. The present age has not been lacking in self-complacency, but even in its most conceited



FIRST FLOOR PLAN OF VICTORIA INSTITUTE, WORCESTER: MESSRS. WOODHOUSE AND WILLUGHBY, ARCHITECTS.

better "workmanship and material was as strongly insisted upon as the expected saving of the contractors' profits" when the Works Department was established, and that "the manager cannot be officially aware of the excessive pressure which was in the earlier days of the Council put upon my department to exact the best quality of materials and workmanship from everyone over whom I had influence." As regards the supervision which he exercised, the architect admits that bricks, wood and other materials were condemned, but simply because they were bad. "There was no foundation for the statement that the letter of the specification was strained in any degree, the direct contrary being the case." The two departments will have to fight out this difference of opinion on a matter of fact. The architect concluded by giving his opinion of the Works Department. "I had," he says, "strongly advised that, in the first instance, small jobs only should be undertaken, so that experience might be gained. But when the Works Department was organised, it was found necessary to supply it with the whole of the work that could possibly be handed over to it. Much of its earliest work was necessarily experimental, and some of its methods were, in my judgment, not calculated to be successful. It would be quite untair to charge against the workmen the whole

edifice, which is composed of a facing of Portland stone and Leicestershire bricks, is ranged round a Central Courtyard, approached by carriage entrances from St. Martin's-le-Grand and King Edward Street, and is five stories in height. All the floors are of concrete, with steel joists, and the roofs are asphalted. The external doorways are of polished granite. The internal arrangements are striking, the main staircase being exceedingly handsome. The flooring of the corridors is of stone mosaic, and that of all the larger rooms of wood parquet. Throughout the building due regard has been paid to light and air. Two of the rooms on the third and fourth floors respectively are especially spacious, each measuring 100 feet long by 45 feet wide, and each calculated to accommodate at least 100 clerks. The apartments which will be occupied by the Postmaster-General and the Secretary are at the south-west corner of the pile, on the ground and first floors. The Solicitor to the Post Office and the Receiver and Accountant-General and their staffs will also be housed in the new building. The whole of the fourth floor it is intended to devote to the female staff employed in the Postal Order Branch. There is a large sub-ground floor available for clerical work, and at a greater depth still a spacious basement, not only under the building but beneath the Courtyard as well,

moments it has not arrogated to itself equality with the fifteenth and sixteenth centuries in respect of Architecture, Painting, Sculpture, or any of the fine plastic Arts. We have had a sort of artistic Renaissance of our own, and very interesting, very salutary, and very refining it has been to a generation whose more immediate predecessors had devoted themselves to the cultivation of the Useful rather than to the pursuit of the Beautiful. But, as compared with the memorable rejuvenescence of Art which was taking place when the Medici first established their hold on Florence, and the Turk captured Constantinople, it must be pronounced an artificial, and, as far as satisfactory originality is concerned, a comparatively barren movement, notwithstanding the many charming, and some powerful, productions it will bequeath. But perhaps the second or later Renaissance has not uttered its last word; and, meanwhile, its leading and most successful spirits are stimulated by a sound instinct when they turn their faces to the real cradle and nurse of their praiseworthy endeavours. For an artist to be invited to exhibit his works in Venice is to receive the highest and most agreeable compliment that could possibly be paid him; since he is thereby admitted to the company of the immortal masters of his craft.

The Builders' Journal COMPETITIONS.

No. 2.—A Village Club House.

Mr. Leonard Stokes, F.R.I.B.A., has kindly undertaken the task of adjudicating upon the designs in this Competition, and his award will be announced in due course.

No. 3.—Swimming Baths.

Designs for Swimming Baths in a country town of 5,000 inhabitants. To contain cold water bath fifty feet long, three feet to six feet deep, with necessary dressing boxes; six private washing baths for gentlemen and three for ladies; necessary heating and ventilating appliances to be provided, together with waiting and caretaker's rooms, the entire cost not to exceed £3,000. The site is 100 feet deep and of any necessary frontage, but entrance can only be obtained from the front. All designs to be delivered on or before Monday, the 10th day of June.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.
Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

Men who Build.—In our last sketch, that of Mr. Charles Heathcote, of Manchester, it should have been stated that most of the buildings mentioned therein, and many that were illustrated, were the joint work of Mr. Heathcote and Mr. W. H. Rawle, who were formerly, and for some years, in partnership. It is but just to Mr. Heathcote to remark that he mentioned this fact to our Contributor, who omitted any reference to it in his M.S. Our sincere apologies are due to Mr. Rawle, and we offer them.—ED. BUILDERS' JOURNAL.

Trade and Commerce.

New National Schools, Newcastle-under-Lyne.—These Schools will replace old buildings in Bagnall Street, and have cost over £4,000, exclusive of site. They are of a plain character, being of brick, with Ruabon terracotta dressings from the works of Mr. T. Edwards, the gables of Main Front towards the Ironmarket being treated in the style prevailing in the old Flemish brick buildings. The general contract has been carried out by Messrs. H. & R. Inskip, of Longton, from the designs and under the personal superintendence of Messrs. Chapman & Snape, architects, Newcastle; Messrs. R. Boyle & Sons, London, being intrusted with the ventilation.

"Practical Telephony."—Under this title, a new and well-written series of articles is now appearing weekly in the columns of our penny contemporary *Electricity*. It is being written by Messrs. James Bell, A.I.E.E., and S. Wilson, and should interest a very large number of readers, especially in view of the inquiry now being held by the Government.

LONDON "RIGHTS OF WAY."

THOSE who know the City of London are often able by means of threading courts and alleys to escape the crowded thoroughfares, and at the same time considerably shorten their journey. For some time past complaints have been made that owing to large firms and public companies buying up large blocks of buildings, gates have been erected at the entrance to some of the courts, and the thoroughfares have thereby been completely in the hands of private persons. A recent case of alleged encroachment came before the City Commission of Sewers, one of whose officers, the solicitor, reported that there never had been a public right of way, while the engineer affirmed that since 1867, the Commission had sewered the court in question, and had lighted and paved it. The matter, which relates to Plough Court, Barbican, has been adjourned from time to time, and was recently disposed of at the meeting of the Commission. It appears that three owners are concerned in the closing up of the court, they having a right of way. The initiative was taken by the Trustees of St. Giles's Cripplegate, who were the largest owners, and who claimed their right to put up the obstruction—a gate. The discussion was animated, the Committee having reported, recommending that no further action be taken. An amendment to refer the matter back was lost, and then Mr. Morton moved the adjournment of the Commission in order to prevent the solicitor giving a further opinion. He stated that the solicitor was also interested in the question in another way, his firm being the solicitors acting for the persons desirous of closing the court. Mr. Wallace seconded, and pointed out that all public bodies appointed another legal adviser when their own was acting already for the persons with whom negotiations were being carried on. The solicitor said it was true that his firm were acting for the Trustees of St. Giles, but he had ample proof that no right of way had ever existed; and it was upon that proof that he advised the Commission. The motion for adjournment was lost, and the recommendation of the Committee was agreed to.

It is proposed to erect a Memorial to the late Sir George Chesney, who took a leading part in the founding of the Royal Indian Engineering College, Cooper's Hill, Staines.

THE new two-storey Day School in connection with St. John's Church, New Clee, by the side of the old premises in Hamilton Street, has been completed. The total cost of the new block, together with small extension, is £1,500. Accommodation has been provided for 310 children.

THE Enfield School Board, upon the award of the assessor, Mr. J. Vicar Anderson, has resolved to accept the designs submitted in open competition, by Mr. G. E. T. Laurence, of Queen Victoria Street, London, for the Chesterfield Road School. The designs of Mr. Jones, of Harley Lodge, Bush Hill Park, were placed second.

Correspondence.

The Editor welcomes Correspondence on matters of general interest. Gentlemen thus addressing the Editor should condense their communications as much as possible.

"H. A.," Croydon, writes: "Would any of your readers kindly tell me the best thing to do for the Foundation of a small house, when running sand is found in the trenches? The site is on a hill-side in Kent."

SAWDUST.

It is announced from Colon that a thousand labourers have been engaged for work on the Panama Canal.

WE understand the Chilean Government has invited English and American tenders for the construction of a number of railway engines.

ON the Queen's Birthday the Prince of Wales will unveil the handsome Pulpit erected in Norwich Cathedral in memory of Bishop Pelham.

THE Government has commissioned Mr. Thorneycroft to execute a large statue of Cromwell. It will probably be placed at Westminster.

THE Russian Government has under contemplation a scheme for establishing direct railway communication between St. Petersburg and the Ural Region.

A MOVEMENT is being initiated by the Mayor of Eastbourne for the erection of a Statue of the late Duke of Devonshire, who has done so much to advance the prosperity of the town.

THE Palais de l'Industrie in Paris, built at a cost of nearly £1,000,000 for the Exposition of 1855, is about to be pulled down to make room for the buildings of the Exposition of 1900.

SIR LLEWELLYN TURNER has presented the borough of Carnarvon with the museum of local antiquities he has for some years been forming in the Castle, of which he is the deputy constable.

THE death is announced, at Paris, at the age of 60, of M. Eugene Bellangé, son of the military painter, Hippolyte Bellangé, and himself an historical painter, though of less repute.

COLONEL JOHN O. HASTED, C.E., held an inquiry at the Town Hall, Hoyland, on Wednesday last, respecting an application from the Hoyland District Council for power to borrow the sum of £22,800 for Sewage Works and Store Sheds, Stables, &c.

ON Tuesday the Paddington Vestry decided to sanction the erection of a suitable Memorial Statue to Mrs. Siddons on that portion of Paddington Green, facing Harrow Road, in the event of a sufficient sum being subscribed for the purpose.

THE monster Exhibition to be held next year at Nijni-Novgorod will be the greatest show of its kind ever held in Russia. The Exhibition and town will be illuminated by the electric arc and incandescent lights, and an electric railway and a service of balloons will convey visitors from one side of the Volga to the other. The cost of the lighting, railway, and balloons is put at £20,000.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BANGOR.—For building semi-detached villas at Upper Bangor, for Mr. Lloyd and Captain Davies. Mr. Richard Davies, architect:—

Pritchard, W. and O., Llanfair	...	£2,420	0	0
Jones, W., Bangor	...	2,133	0	0
Williams, R. and J., Upper Bangor	...	1,940	0	0
Jones and Williams, Hiraal, Bangor	...	1,850	0	0
Williams, E., Garth, Bangor	...	1,595	10	0

*Accepted.

BANGOR.—For building villa residence at Garth-road, Bangor, for Mr. Charles Pozzi. Mr. Richard Davies, architect, Bangor:—

Williams, E., Bangor	...	£2,390	0	0
Williams, R. and J., Upper Bangor	...	1,945	0	0
Jones and Williams, Bangor	...	1,618	0	0
Jones, W., Bangor (accepted)	...	1,489	0	0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.
A. W. ITTER. Brick Manufacturer, Fletton House, **PETERBOROUGH**.
Brickworks and Railway Siding on Great Eastern Railway.

METAL

CASEMENTS of

every description.

GLASS ROOFING

Shelley & Co's & Hopes Patents

HENRY 55
HOPE LIONEL
ST.
BIRMINGHAM

LONDON 13 King St
MAN - Cheap side.
- CHESTER 8 Exchange

GARTER & CO

TILES MOSAIC

FAIENCE

Poole Dorset

HARMER & HARLEY,
GENERAL PRINTING
CONTRACTORS,
220, Upper Thames Street,
AND
56, Coleman Street, E.C.
Telephone No. 15,009

LONDON.—For rebuilding No. 31, St. John's-lane and portion of the Friends' Meeting House, Clerkenwell, E.C., for the Society of Friends. Messrs. Edward Saunders and Son, 6, Bishopsgate-street Without, E.C., architects. Quantities by Mr. Walter C. Phillips:—

Beddall, Hall ...	£2,250 0 0
Ashby and Horner ...	2,098 0 0
Ashby Bros. ...	2,036 0 0
Colls and Sons ...	2,033 0 0
Jerrard and Sons ...	2,029 0 0
Mattock Bros. ...	1,955 0 0
Lawrence, E., and Sons ...	1,940 0 0
Prestige and Co. ...	1,927 0 0
Reason ...	1,875 0 0
Woodward and Co. ...	1,860 0 0

LONDON.—For the extension of nursing home at the London Hospital, Whitechapel. Mr. Rowland Plumble, architect:—

Yates, J. ...	£15,841 5 6
Whitehead and Co. ...	13,050 0 0
Roberts, L. H. and R. ...	13,035 0 0
Rider and Son ...	13,609 0 0
Goodman ...	13,333 0 0
Williams, H. J. ...	13,275 0 0
Lawrence, E., and Son ...	13,193 0 0
Perry and Co. ...	13,166 0 0
Holloway Bros. ...	12,985 0 0
Shepherd ...	12,885 0 0

LONDON.—For an addition to the west end of St. Frideswide's Church, Poplar, for the Christ Church Oxford Mission. Mr. Robert Willey, F.R.I.B.A., 33, New Bridge-street, Blackfriars, E.C., architect:—

Carmichael ...	£870 0 0
Woodward and Co. ...	792 0 0
Richardson ...	763 19 0
Kirby and Chase ...	760 0 0
Tyerman ...	717 0 0

New Ross (Ireland).—For the erection of the new parish church of St. Mary, for the Very Rev. Canon Kavanagh, P.P.D.D.V.F. Mr. Walter G. Doolin, M.A., Lic.Civ.Eng., T.C.D., Dawson Chambers, Dublin, architect. Quantities by Messrs. Morris, Dublin:—

Cullen, A., New Ross (accepted) ...	£16,000 0 0
-------------------------------------	-------------

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO. Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD; "MELLOWES," LONDON.

BANGOR.—For building pair of residences at Upper Bangor, for Mr. Charles Pozzi. Mr. Richard Davies, architect:—

Williams, R. and J., Upper Bangor	£1,857 0 0
Pritchard, W. and O., Llanfair	1,778 0 0
Jones and Williams, Bangor	1,658 0 0
Jones, W., Bangor	1,589 0 0
Williams, E., Bangor (accepted)	1,465 0 0

BARRY.—For new girls' school, cookery school, and caretaker's residence, Romilly-road, Barry, for the United District School Board. Mr. George Thomas, F.S.I., Cardiff, architect:—

Money, H. J., Barry ...	£7,065 0 0
Small, F., Barry ...	6,538 0 0
Davies, H., Cardiff ...	6,532 0 0
Jones, D. C., and Co., Gloucester	6,435 0 0
Lloyd and Tape, Barry Dock	6,275 0 0
Evans, E. R., and Bros., Cardiff	5,959 0 0
Davies, D., Cardiff ...	5,770 0 0
Rutter, G., Barry (accepted) ...	5,395 0 0
(Architect's estimate), £5,444	

COLCHESTER.—For rebuilding premises, Mitre-street, Colchester, recently destroyed by fire, for Mr. Robert Howe.

Mr. G. H. Page, architect, Trinity Chambers, Colchester:—	
Bowles, G., Colchester ...	£1,370 0 0
Dobson, G., Colchester ...	1,197 0 0
Farran, G., Colchester ...	1,145 0 0
Chambers, A., Colchester ...	1,045 0 0
Dupont, F., Colchester (accepted) ...	984 0 0

DURHAM.—For building eight dwelling-houses, off Ather-ton-street, for the Durham Co-operative Society, Limited. Mr. H. Henry, architect, 11, North Bailey, Durham:—

Accepted tenders,	
Bradley, J. G., mason ...	£853 0 0
Walton, W., joiner ...	579 15 0
Shibitt, T., plasterer ...	138 0 0
Blakey, W. T., slater ...	102 15 0
Almond, N. W., plumber ...	94 0 0
Dodd, T. H., painter ...	42 16 10

KENLEY.—For building Police Station at Kenley, for the Receiver for the Metropolitan Police District. Mr. John Butler, architect. Quantities by Mr. W. H. Thurgood:—

Graham ...	£4,200 0 0
Grover ...	4,097 0 0
Higgs and Hill ...	3,984 0 0
Lathey ...	3,950 0 0
Smith ...	3,950 0 0
Holloway Bros. ...	3,885 0 0
Bullock ...	3,870 0 0
Lascelles ...	3,859 0 0
Hart ...	3,857 0 0
Richardson, J. O., Peckham* ...	3,789 0 0

*Accepted.

LLWYNYPYIA (Wales).—For rebuilding Jerusalem Welsh Baptist Chapel. Messrs. Griffiths and Jones, P.A.S.I., Tonypandy and Pontypridd, architects:—

Rowlands and Lloyd, Tonypandy ...	£4,395 0 0
Jenkins, C. Porth ...	4,025 0 0
Jones, D. C., and Co., Gloucester	3,989 0 0
Evans, D., and Sons, Penygraig	3,853 0 0
Jones, D., Treforest (accepted) ...	3,586 0 0

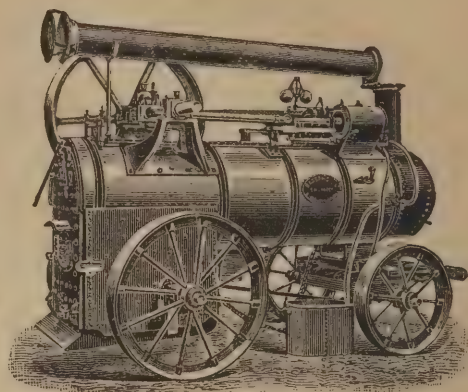
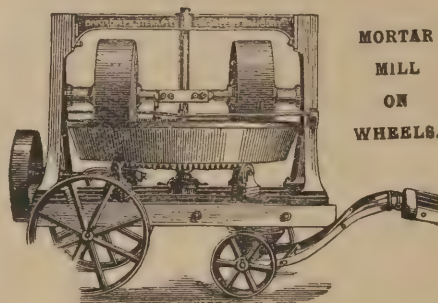
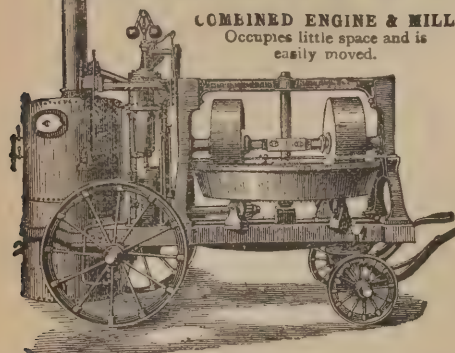
LONDON.—For the erection of a new vestry at All Saints' Church, South Acton, for the Rev. J. Ma Arthur, M.A. Mr. Edward Monson, F.R.I.B.A., Acton Vale, W., architect:—

Chamberlain Bros., Hammersmith ...	£825 0 0
Hooper, G., Acton ...	735 0 0
Christie, J., Shepherd's Bush ...	731 0 0
Lyford, G., Shepherd's Bush ...	730 0 0
Nye, T., Ealing ...	685 0 0
Dorey and Co., Brentford (accepted) ...	649 0 0

LONDON.—Painting and other works at St. Marylebone Infirmary, Rackham-street, Notting Hill, W.:—

White ...	£2,900 0 0
Wall ...	1,897 0 0
Nye ...	1,870 0 0
Lilly and Lilly, Ltd. (accepted) ...	1,839 0 0
Barber and Bellamy ...	1,550 0 0

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

LONDON.—For repairs, drainage, improved sanitary, and other works, at St. George's Union Workhouse and Infirmary. Mr. Saxon Snell, F.R.I.B.A., architect:—

Leslie and Co., Kensington-square...	£4,719	0	0
Heywood, R. M., Hammersmith...	4,490	0	0
Foxley, G., King-street, W...	4,300	0	0
Pearce, W., Grayton-road, N.W.	4,246	0	0
Mowlem and Co., Westminster	4,200	0	0
Lidstone, N., Blackstock-road, N.	4,193	0	0
Wall, H., and Co., Carlton Works, Kentish Town*	3,897	0	0

* Accepted.

NORTHAMPTON.—For enlargement of National Schools at Finedon Messrs. Mosley and Anderson, Goodyear Chambers, Northampton, architects and surveyors:—

Branson, G., and Son, Northampton...	£439	0	0
Ball, A., and Son, Northampton	435	0	0
Tebbutt and Pratt, Wellingborough...	401	0	0
Chapman, T., Finedon...	395	0	0
Wilford and Judkin, Northampton	388	15	0
Henson, F., Finedon*	387	10	0

* Accepted.

RODBOURNE CHENEY.—For building infants' school, and alterations to Haydon school, for the Rodbourne Cheney School Board. Mr. William Drew, M.S.A., architect, 22, Victoria-street, Swindon.

Gerring, W., Swindon...	£845	10	0
Flewelling, H., Wootton Bassett	730	0	0
Williams, C., Swindon	724	17	0
Chambers, W., Swindon*	615	0	0

* Accepted.

ROWHEDGE.—For erection of buildings on the Lion and Field Estate, Rowhedge. Mr. G. H. Page, architect, Trinity Chambers, Colchester.

Warricker, J.	£420	0	0
Dupont, F.	365	0	0
Blaice, G.	359	10	0
Rackham, G.	358	0	0
Diss, A.	350	0	0

RUSHDEN.—For new shoe factory, Station-road, Rushden, for Mr. H. Perkins. Mr. Herbert Adnitt, architect, Harborough-road, Rushden. Quantities by architect:—

Sparrow, H., Rushden	£1,080	0	0
Whittington and Co., Rushden	1,079	0	0
Bayes, C., and Son, Rushden	1,075	0	0
Wilmott, T., Jun., Rushden	1,054	0	0
Berrill, T., and C., Irchester	1,047	0	0
Marriott, R., Rushden	1,025	0	0
Whitbread, W. T., Northampton	1,022	0	0
Hackley Bros., Wellingborough*	997	0	0

* Accepted.

WATFORD.—For alterations to the workhouse, for the board of Guardians:—

Brightman	£3,199	0	0
Neall	3,175	0	0
Waterman	3,169	0	0
Wiggs	2,999	0	0
Andrew and Sons*	2,747	0	0

* Accepted.

WALTHAMSTOW.—For the erection of dwelling house and coach building premises in Markhouse-road, Walthamstow. Jasper J. Kelf, architect, 26 High-street, Walthamstow. —

Morrison and Goodwin, Southgate-road	£661	0	0
Thompson, Leyton	640	0	0
Rawlins and Furner, Walthamstow	550	0	0
Dartnall Bros., Leytonstone	535	0	0
Burdock, Leyton*	533	15	0

* Accepted.

WALTHAMSTOW.—For the erection of a pair of villas in Elmsdale-road, Walthamstow. Jasper J. Kelf, architect, 26, High-street, Walthamstow:—

Morrison and Goodwin, Southgate-road	£950	0	0
Thompson, Leyton	817	0	0
Lawrence, Waltham Abbey	667	10	0
Dartnall Bros., Leytonstone	667	0	0
Rawlins and Furner, Walthamstow*	650	0	0

* Accepted.

WINTON (near Bournemouth).—For the erection of British and Sunday schools. Messrs. Lawson and Donkin, Yelverton Chambers, Bournemouth, architects and surveyors. Quantities supplied by architects:—

Holly, F., Winton	£1,509	0	0
Entwistle and Cox	1,490	0	0
Hoare, W.	1,487	0	0
George and Harding	1,464	0	0
Lucas, J. W.	1,460	0	0
Hoare, F., and Son	1,450	0	0
Hunt, C., Winton (accepted)	1,436	15	0

(Rest of Bournemouth.)

CITY OF CHESTER.

TO ARCHITECTS.

PUBLIC BATHS.

The Town Council invite COMPETITIVE PLANS (to be accompanied by detailed specifications, and estimate of cost) for PUBLIC BATHS, to be erected in the Hop Pole Paddock.

A premium of £50 will be paid to the author of the plans which may be selected, which amount will be deducted from the author's commission in the event of the work being proceeded with, and his being employed to superintend the same; the selected plans, specification, and estimate to be the property of the council, who will be assisted by a competent professional assessor, but reserve to themselves the right of ultimate decision.

The Council do not bind themselves to accept any of the plans. Copies of conditions and instructions may be obtained from the City Surveyor, Town Hall.

The plans, &c., without signature, but with a motto or device, and a letter (sealed) containing a corresponding motto or device, and the architect's name and address, to be sent addressed to "The Chairman, Baths Committee, Chester," not later than the 2nd day of JUNE 1895.

By Order.

SAML. SMITH, Town Clerk.

Chester, April 2nd, 1895.

LADDERS, BARROWS, STEPS,

TRESTLES, SCAFFOLDING,

For Sale or Hire.

J. BATCHELAR & CO.,

48, HAMMERSMITH ROAD. W

Quantities, &c., Electrographed

Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.

Telegrams, "OLDACRES, LONDON."

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.

SLATE MERCHANT,

SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,

Bethnal Green, London, E.

TO CONTRACTORS AND PAVIORS.

The Urban District Council of Melton Mowbray, in the County of Leicester, require TENDERS for PAYING the FOOTWAYS of certain streets with Patent Victoria Stone and "In Situ" Concrete Paving, Kerbing, Channelling, &c.

Applications for specification and bill of quantities to be made on or before Tuesday, the 7th day of May, to Mr. EDMUND JEEVES, Nottingham-street, Melton Mowbray, Surveyor to the above Council, accompanied by the sum of One Guinea, which will be returned on receipt of a bona fide Tender from the applicant.

Plans may be seen at the Surveyor's Office any day between the hours of Ten a.m. and Five p.m., and sealed and endorsed Tenders must be sent to me at or before FIVE o'clock p.m., on WEDNESDAY, the 22nd day of MAY instant.

The Council do not bind themselves to accept the lowest or any Tender.

RICHD. BARKER, Clerk to the Council.

Sherrard street, Melton Mowbray, May 1st, 1895.

GREAT BENTLEY SCHOOL BOARD.

TO BUILDERS AND CONTRACTORS.

The Great Bentley School Board invite TENDERS for the ERECTION of NEW SCHOOLS at Great Bentley, Essex, for 250 Children, Board Room, and Master's Residence, Boundary Walls, &c.

Drawings and Specifications may be seen at the Office of Mr. J. W. START, F.S.I., &c., Architect, Colchester, also of Clacton-on-Sea and Harwich, on and after the 30th instant.

Builders wishing to Tender must send in their names at once, together with the sum of One Guinea, to be deposited for the quantities, which will be returned on receipt of a bona fide Tender.

Tenders, on forms supplied, sealed and endorsed "Tenders for Schools, Great Bentley," should be addressed to the Board, and delivered at the residence of their Clerk, by TEN o'clock on THURSDAY morning, the 23rd day of MAY, 1895.

Power is reserved to reject the lowest or any Tender.

Colchester, April 25th, 1895. By Order, C. D. KEIGWIN, Clerk.

TO BUILDERS and CONTRACTORS.

CONTRACT No. 1.

The Guardians of the Mile End Old Town are willing to receive TENDERS for the ERECTION of a new STEAM LAUNDRY and COTTAGE at the Infirmary, and for certain ALTERATIONS and ADDITIONS to the LAUNDRY and BOILER-HOUSE, at the Workhouse, all situate in Bancroft-road, London, E.

The plans can be inspected and copies of the specifications and bills of quantities obtained of the Architect, Mr. CHAS. F. BURDEN, at his Office on the premises, on and after THURSDAY, MAY 9th, 1895, between the hours of TEN a.m. and FOUR p.m. on production of a receipt of the deposit of a £10 Bank of England Note, made with the undersigned, which deposit will be returned to parties sending in a bona-fide Tender at the time and in the manner specified, accompanied with such specifications and bills of quantities.

Sealed Tenders, endorsed on the outside "Tender for Laundries," properly filled up and attested, must be delivered at my Office not later than FIVE o'clock on the evening of the 23rd day of MAY, 1895.

Persons tendering will be required to observe such hours of labour, and pay such rates of wages as are generally considered fair with the several trades engaged, and to enter into a bond with approved sureties for the due performance of the contract.

The Guardians do not bind themselves to accept the lowest or any Tender.

WILLIAM THACKER,

Clerk to the Guardians of the Hamlet of Mile End Old Town. Guardians' Offices, Bancroft-road, London, E., April 24th, 1895.

SPHINCTER WORKS,

EMERSON STREET, LONDON, S.E.,

MANUFACTURERS OF

LECLANCHE BATTERIES, TELEPHONES,

ELECTRICAL THERMOGRAPHS,

WATER TELEGRAPHS, and COMPLEX

COMMUNICATIONS of all kinds

The Builders' Journal.

Vol. I., No. 15.

Tues., May 21, 1895.

ILLUSTRATIONS.

Bowdon Church, The East End	225	Sketch of Mr. Prior's House, Dorset	231
The Sun Dial, Whatton House	226	A View of Deansgate, Manchester	232
The Church of St. Andrew, Boscombe, Bournemouth	226	The Entrance to the Town Hall, Manchester	232
A House near Leicester: By James Ransome	227	Owen's College: A Waterhouse, R.A., Architect	232
A New View of the Imperial Institute	227	The Town Hall, Manchester	233
Old Hall, Worsley	229	The Eye Hospital, Manchester	234
Portrait of Mr. Francis T. W. Miller	229	The Asylum for the Blind, Manchester	234

CONTENTS.

Architects' Fees	225	"The Queer Side of the Profession"	235	Architectural Ironwork	238
An Announcement	225	New Public Hospital at Sheffield	236	Doorways of Ancient Irish Churches	238
Wooden Structures	226	The Cardiff Dispute	236	Sanitary Proportions of Rooms	238
Architecture at the Academy	226	The "Key Method" of Ventilating	237	Trade and Commerce	239
Bricks and Mortar	228	Hospitals	237	Awards and Assessor's Report	239
The Building Trades Crisis	232	Twenty Millions for an Aqueduct	237	The Builders' Journal Competitions	240
Impressions, No. 1.—Manchester	232	A New Scotch Asylum	237	Society Meetings	240

Architects' Fees.

In quaint old towns some curious things still happen. Even an architect can become a Mayor, and, as Mayor, act professionally (in the town's service) as an architect. It is a little complicated we admit, and contrary to usage, but we are rather amused by the Truro "breeze." Architects know Truro chiefly for its modern attempt at a Cathedral; an attempt praiseworthy in the extreme were it anything but shockingly unfinished. When we were last there a sight of sheer hoarding and boarding blocked the "Nave"

—a Nave left to the imagination. We confess to no liking for these "lopped" buildings. However, Truro is to have another building, and Mr. Passmore Edwards is the money-magician. It is to be called the Passmore Edwards Free Library, and is to cost £2,000. We gather that the Mayor, Mr. Trevail, being an architect, rather naturally (in quaint old towns) prepared the plans which have been "approved." If Mr. Trevail had done this for nothing, we daresay the Truro City Fathers would have remained somnolent and content. But even Mayors have an eye to their purses and we cannot say that we altogether blame Mr. Trevail, though it is an understood corporate canon that a man should not work for the town while administering the town's money. But this happens to be Mr. Passmore Edwards' money (though given to the town), and perhaps that makes all the difference. To obviate the difficulty, a wise and kindly Town Clerk suggested that Mr. Edwards pay the architect direct, and remit to the Council £1,900 only of the £2,000, this to "avoid misunderstandings," as the Committee discreetly put it. Moreover, Mr. Trevail has not a high opinion of his Council, and professional dignity must be maintained as we all know, only it is a costly luxury. "The Mayor said the architect would not be paid by the Council at all. As Mayor of the City, he would decline to take a single farthing from the Corporation." This was Mr. Trevail upon himself in his dual capacity. A Mr. Roberts said something about "blinding our eyes," but, we take it, it was not profane; at any rate, nothing happened. The City

Fathers continued to see clearly—according to their lights. After considerable heat, and some legitimate discussion, the Town Clerk read the context of a letter he had written to Mr. Edwards, pointing out that Mr. Trevail could not be legally remunerated if Mr. Edwards handed over the whole £2,000, and suggesting that "the difficulty may be got over by presenting the plans and architect's supervision, and such a sum as with the cost of such plans and supervision will make up £2,000." Mr. Edwards could not see it at



BOWDON CHURCH, NEAR MANCHESTER: THE EAST END.

first; he had handed over £2,000 to "be expended on a Free Library," and left "to the Corporation the selection of site, architect, builder, &c." But someone must have whispered in the donor's ear, for, writing almost by next post, Mr. Edwards was willing to do "just what the Truro Corporation desire;" in other words he was prepared to pay them £1,900, and the architect £100. So this settles it, we hope, and the Mayor-Architect will get his cheque for £100, and really we see no reason why not, providing Mr. Trevail's work be good and his plans something near perfection, only we were so surprised to learn of an Architect-Mayor that we could not pass the incident by; and one is very disposed to forgive Mr. Trevail, in any case,

if only because we are so glad to know that an Architect can be addressed as His Worship the Mayor! The Profession is looking up.

An Announcement.

From time to time we shall have announcements to make that will, we think, bring our paper still closer in touch with our readers, with their idea of what an Architectural paper should be, and with ours. We have passed our quarterly number, and we are satisfied. We are so satisfied that we shall add further features; we shall give more reading matter; we shall maintain the illustrative excellence at which we have aimed; increasing it by degrees. Already our pages are being made more compact; the type is closer without loss of clearness, and we are arranging for a stiff green cover that will give "grip" to our paper—indicative of our policy. The inside sheets of the Journal will be printed wholly in white so that the reading matter and the advertisements may be extended at will. The increase in our professional news and in advertisement contracts for long periods, demand this. In this, our current number, also, we illustrate our criticism of Architecture at the Academy; a novel effort in professional journalism, we venture to think. Our Impressions of the Architecture of English and Foreign Cities will be vivid and virile and critical; we are arranging also

for "Men who Build" from America. Thus we have done something, so far, as guarantee of our good faith; the Architectural World is pleased with us, and says so; there is no need now for the fanfare of trumpets, the preliminary flourish; we ask our readers for their cordial co-operation in elevating and stimulating Architecture and the "Art of Building;" is it not a good cause? Moreover, we have had extended to us by our advertisers and by our readers the co-operation that spells success. Had our individual battle been harder, we should have won, for the "sinews of war" will not fail. It has been comparatively easy, but much remains to do. Of far more weight even than the chorus of kindness we

have received, is the fact that we have not met with a single rebuff. Finally, the price gives us our strength and we can afford it. At the end of our second quarter we shall add a double lithographic sheet of illustrations particularly devoted to scale drawings, structural plans, and current architectural work. The sheets shall compare with any Architectural Supplements in the World. That is all we desire to announce at the moment.

Wooden Structures.

THE Birmingham Corporation are impounding the waters of two Welsh rivers, near Radnor, for supplying its town with water, and having a thousand workmen and their families under their control, they have erected a model village—of wood. The houses are of different type, and the village has its dispensary, its hospital, its post office, savings' bank, and its fire brigade station, public baths, recreation hall and reading rooms—even a public-house, where liquor of all kinds, purchased by the Corporation, is retailed to the residents. What interests us at the moment is this point of timber construction. A summer or two ago we designed a little wooden bungalow, which we were desirous of erecting on a lovely site overlooking Coney Island at the mouth of the Thames. It was a mile from Benfleet village and the nearest habitation, but the local authorities prohibited the luxury of a wooden house and spoilt our little game entirely. And we protest. In the depth of the country, on the outskirts of our woods, on the banks of our beautiful streams, there are thousands of quiet, secluded spots where weary brain workers would gladly pitch their little wooden homes if they were permitted by local laws to do so. In towns or even villages where habitations adjoin, or are close together, wooden construction may be picturesque, though it is not safe. Surely, away on our hillsides, man should be permitted to run the risk of frizzling himself to death if he chooses, when he occasions no risk to his fellow beings. The Birmingham Corporation have evidently taken the risk at Radnor, perhaps because the site of their "town" does not come under the jurisdiction of any new-fangled local authority, but that cannot, or at any rate should not, empower them to break laws which are presumed to exist universally in this country for the safety of its inhabitants. If the Corporation of the Midland capital are justified in doing this, then, by what earthly sense, are we debarred from building our bungalow in the wilds of Essex, miles away from the habitation of man? Laws of this nature should be universal. A man should be permitted to build a wooden house a hundred yards away from any other house, or he should not; there should be no middle course governed by the caprice of local nobodies who generally understand more about bacon curing than anything else. For our part we should welcome the sight of the chalet and the bungalow along our country pastures and our river banks. Life is more ethereal than it was; we live lighter and quicker; and the little country home, neatly and picturesquely constructed of honest timber, soothes and pleases the toilers of our towns, and hides them away from the awful dwellings which creep into being under the artistic guidance of our jerry country builders.

It has been decided to commence the works in connection with the open air Baths in Burlington Street, Liverpool, at once, and sanction has been given to a proposal for introducing electric bells as an experiment in some of the Corporation Baths.

ARCHITECTURE AT THE ACADEMY.

BY OUR SPECIAL REPRESENTATIVE.

WITH SKETCHES BY C. E. MALLOWS.

OUR first notice, in the issue of the week before last, was written whilst we were still under the influence of Mr. Wilson's masterly works. If it were possible to dismiss these from one's thoughts whilst in the room (which it is not) we should be obliged to say that the whole show of Architecture hardly rises above mediocrity. There are some notable exceptions, of course, both above and below that level, but generally speaking, the average of recent years has not been reached, and there are some half dozen works,



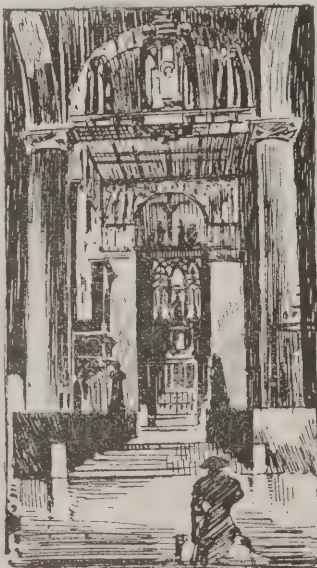
which we mention later on, so bad, both in drawing and design, that it is a mystery how they passed the Hanging Committee without the red and white crosses they so well deserve.

It is well-known to be a dangerous thing to prophesy unless you know, but we were right in saying in our first notice that the Architecture would be more attractive this year to the general public than it has been in years past. It is perfectly true that a touch of old times occurred, when a certain well-known and antiquated Divine put his reverend head within the door and immediately withdrew it, as if he had been in some way silently hurt, remarking to a friend, "Oh, these are the works of architects, you know, and they are best left to themselves," but then, perhaps, he was in a hurry to discuss one of Messrs. Spiers & Pond's famous rejected chickens in the refreshment room below. We spent some time in the Galleries last week, and had an excellent opportunity of judging. Generally speaking, Mr. Wilson's drawings were a great attraction, and it was the opinion of one dis-

tinguished artist that his drawings were equal to anything in the whole Exhibition, and folks stopping at the door to look at these remained to wonder at others, so that at times the place was positively crowded.

Conspicuous in recent years among the authors of Church Architecture has been the name of Leonard Stokes. His fine design for the large Roman Catholic Church at Miles Platting, Manchester, in the Academy of 1892, will not easily be forgotten, or the drawings by which it was illustrated. He has nothing so important this year as that, but his fresh and vigorous little "Church of All Souls", Peterboro', No. 1494, which we shall illustrate in our next number, will be much admired. It has a well disposed arrangement of window and wall space, and his treatment of the West End, with the large window filled with finely-arranged lines of tracery (influenced, perhaps, by certain windows in Tewkesbury Abbey), and the plain wall beneath are excellent. The Gable has those little curves, finishing the lines at the springing, which Mr. Stokes is so fond of, and which give a good deal of character to his work. The Presbytery, which joins the Eastern End of the Church, and is at right angles to it on the North Side, is simply designed, with a cleverly-treated bay window, which we remember to have seen before in one of Mr. Stokes' country houses. This work is illustrated by a pen drawing by Mr. C. E. Mallows. In No. 1529, "A Summer Cottage, Isle of Wight," Mr. Aston Webb shows a reserved treatment of Late Gothic, which well expresses its purpose, and has a studied outline of much character, in harmony with the lines of the hills and downs amidst which the house is situated. The drawing, in pencil and stump, is a little too much detailed, but is otherwise effectively done. Nos. 1478 and 1512 are by Messrs. Ernest George and Peto, the former, "Additions and Alterations to Colworth House near Bedford," is not particularly interesting, and is presumably a continuation of the old work; but there is a very pleasant little corner in the interior view showing the fireplace, hall table, an attractive little panel at the end, and an elevational sketch of a side-board, all of which are characteristically (Ernest) Georgian. No. 1512 illustrates the Interior of the Hall at North Myms, Herts, effectively drawn, of course, but we do not like the somewhat awkward lines of the hooded fireplace.

A prominent exhibit is No. 1490, "The Sun Dial at Whatton House, Loughboro'" for Lady Crawshaw. An excellent design, well conceived, on an old model we dimly remember having once seen in a garden somewhere in the North of England. The figures which support the circular table of the dial stand on a carved



No. 1519



No. 1507

THE CHURCH OF ST. ANDREW
BOYCEBURY, BUCKINGHAMSHIRE
BY H. WILSON.

pedestal raised on two steps, and are well proportioned, admirable in feeling for line, and modelled with much grace and delicacy. It is illustrated by a crisp and telling pencil and stump drawing by Mr. Mallows.

Mr. C. A. Voysey shows a delightful house in stucco and green slates, at Colwall (No. 1,452), which, artistically drawn in elevation as it is, would have been far better illustrated in a perspective view. It has a recessed Garden Entrance simply treated, and there is apparently a Courtyard to the Principal Entrance, which latter is placed to the right under a square Porch with columns at the angles, or perhaps the Entrance is under the small square Tower (finished at the top with a long row of low lights and hipped pyramidal roof), to the left



of the drawing; it is somewhat difficult to say, without a plan, which would have added interest to this design. Another drawing (shamefully skied), is by Mr. Phillip Figgis, of "Proposed Cottages at Harrow" (No. 1,553), an excellent group of half timber and brick daintily drawn in water-colour, reminding one of Mr. Wilson's work of a few years' back. There is a breezy open-air feeling about the whole drawing which is very taking. It should have been hung well on the line. How on earth such a drawing as this, or the pen drawing No. 1,587, should occupy these positions, and such drawings as Nos. 1,580 (which is only mentioned as an example of what to avoid), 1,415, 1,525, 1,536, 1,541 (a caricature in parts of Hadden Hall), and 1,538 (especially 1,538), should have been hung on or near the line in nearly every case, is one of those mysteries which the Hanging Committee presents every year for consideration. No. 1,560 has no right to its position, neither on its merits as a piece of Architecture or illustration. A good drawing will make a commonplace design interesting, but in these cases it is difficult to say which of the two offends the most—the drawings or the buildings.

A good piece of Domestic Architecture in red brick and half timber, thoroughly homelike and English in character, is No. 1,437, Mr. Collcutt's house at "Cold Harbour, Liphook, for Sir Thos. Sutherland," which also we shall illustrate later on. The portion to the right of the drawing, showing the large half-timbered gables and the projecting Entrance Porch in wood, is the proposed addition; the remaining portion of the House, including the Stables, was built some five or six years ago.

Another exhibit by Messrs. Brewill and Bailly is of a house by the water-side at Nottingham, No. 1,587. It shows a good deal of appreciative knowledge of Georgian work, and is simply treated. We like the severe, elliptical-headed entrance doorway and the square pent-house door, and the formal garden in front, with the sun-dial and paths radiating from it. It is illustrated by Mr. C. E. Mallows in a delicately handled pen drawing, carefully and thoroughly worked out, even to the reflection of the house in the water, which is well managed. It is hung far too high for so small a subject.

There are portions of the "Church of S. Matthew, Cockington, Devon" (No. 1,551), by Mr. Nicholson, which appeal as a good study in Decorated Gothic, and there are other portions which would have been better reconsidered. The upper part of the Tower promises well, but we do not admire the two gables by its side, the centre one is out of drawing, and both narrowly escape the commonplace. There is a good deal of distinction in the design, but Mr. Nicholson has done much better work than this.

No. 1,555 is Mr. Aston Webb's design for the Reconstruction of the Staffordshire County Infirmary. It consists of the Centre Administrative Block of three storeys, and Wards of two floors on either side, connected with open

Corridors. The large low lines of the whole front are very pleasing, and in its simple and unpretentious treatment has much charm. It is illustrated by a pen drawing by Mr. Raffles Davison. The drawings in the lower part of the frames show the Hospital as existing before and after re-construction. From this it appears to have been entirely rebuilt. There is a Children's Ward placed at right angles to the Ward on the left side of the building.

Mr. Skipworth is much more successful in design No. 1,559, for "New Church of St. Etheldreda, Fulham" (illustrated by exterior and interior views), than in his larger effort for the Cathedral mentioned last notice. The Chancel is apparently an addition in red brick and stone dressings to an older Church in yellow stocks; this may not be so, but it looks something like it in the drawing. This latter is wanting in force and life, and the design deserves better illustration, but we admire the East End, with the well designed five-light traceried window and recessed arch over; it shows a fine feeling for the value of the blank wall space which occurs below.

The Interior View of the same Church (No. 1,599) shows a plainly treated Interior, with stone ribs to the vaulted roof, with the Chancel raised some eight or nine feet above the level of the Nave floor, an arrangement which gives much dignity of effect. As the Vestries do not appear on the plan, they would probably be contrived in the space below the Chancel.

No. 1,558, the Church of "The Most Holy Redeemer," Chelsea, by Mr. E. Goldie, is an Interior view in a somewhat heavy style of Classic, and is illustrated by a pen drawing by Mr. Brewer. We like Mr. Brewer's colour drawings better than his works in pen and ink.

It is a pleasure to look at No. 1,562, Mr. E. P. Warren's delicately drawn "Interior of a Church for a West London Suburb." It is partly in pencil and partly in water-colour, and executed with much feeling in both. The first three bays of the Nave are shewn; there are Side Aisles after the French plan, and the Nave Arches run the entire height of the Church. The Chancel is of three bays with a plain wooden Vault continued from the Nave, the ribs of which are decorated in a low tone of Indian red. There is much good character in the

colour decoration throughout. This is another instance of the Chancel being raised above the level of the Nave by a flight of seven steps. We much like the design of the East End with the recessed centre window and the narrow two-light windows on either side, and the colour scheme of the Reredos below.

The three bright drawings by Mr. Raffles Davison, in frame No. 1,570, admirably illustrate Messrs. Clark & Moscrop's selected design for the



Darlington Municipal Buildings, which indicates a liking for some of Mr. T. G. Jackson's executed work, and a careful study of Kirby Hall, Northamptonshire, but then it is well interpreted and not caricatured.

(To be continued.)

On Saturday last, at the Spring Exhibition of the Walker Art Gallery, Liverpool, an illustrated lecture was delivered by Mr. E. Rimbault Dibdin, entitled, "In Search of Sunlight," and in the evening Mr. James Lowrie lectured on "The Highlands and Lowlands of Bonnie Scotland."

In the original plan of St. Andrew's Church, Redruth, a handsome Tower is conspicuous, but from want of funds this is left for a future generation to provide. A temporary structure, with a single bell, has, however, been put up within the past few days to remind the parishioners of service hours.

The Vestry of St. Luke's, Skerton, has decided to apply to the Consistory Court for a faculty to erect a new Chancel at the east end of the existing Church. This extension of the edifice has been rendered imperative by a report concerning the organ, which has to be removed from the present chamber much nearer the centre of the Church, in order to save it from utter ruin. The plans, prepared by Austen & Paley, Architects, of Lancaster, show a Chancel, not exactly in accordance with the Architecture of the present Church, which is a bad example of "Modern Early English" Architecture, but one that will be suitable for a new building, if one is ever erected.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
21st May, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

A NEW through communication from the north-east to the north-west of the Metropolitan, formed by the widening of England Lane, Haverstock Hill, at a cost of £6,000, to be borne jointly by the London County Council and the Hampstead Vestry has been opened. The lane was formerly a very narrow thoroughfare, but of late years a great deal of traffic has passed through it, and at times it became exceedingly dangerous. The Vestry took the matter in hand some years ago, and, after great difficulty, succeeded in purchasing the property necessary for widening the lane. Now the lane adequately connects Eton Avenue with Park Road and Haverstock Hill, and an important link of communication has been formed between the north-east and the north-west, opening out a direct line of traffic to the Midland, London and North-Western, and Great Northern Railways.

THE announcement of the impending publication of an important volume dealing with the life and work of the President of the Royal Academy is now made. This book will be uniform in size and style with the monographs of Sir Edward Burne-Jones and Albert Moore, which the same firm has already published, and will contain more than a hundred photogravures and other reproductions of Sir Frederic's works. The biography is written by Mr. Ernest Rhys, and a critical introduction is contributed by Mr. F. G. Stephens. The owners of the better-known pictures and copyrights have, in nearly all cases allowed them to be reproduced, so that the volume will be of the first importance as a record of the President's work.

AMONG the arrangements for the summer season at the Imperial Institute, are an International Railway Congress and Exhibition, to be held from June 26 to July 9, and an International Geographical Congress and Exhibition, to be opened by the Duke of York on the evening of July 26. At the Railway Congress Mr. Frederick Harrison, General Manager of the London and North-Western Railway Company, will report upon the organisation of the central administration and outdoor staff and the various systems of different countries; Mr. A. M. Thompson, the Signal Engineer of the same concern, will deal with the whole question of signals, introducing recent improvements in block and interlocking apparatus; while Mr. C. A. Park, the Company's Carriage Superintendent, will submit a paper upon "Rolling Stock for Express Trains," in which special reference will be made to the type of carriages for such, vestibule trains, improvements in internal arrangements, and various

modes of heating and lighting. Mr. Henry Lambert, General Manager of the Great Western Railway, and Mr. George H. Turner, General Manager of the Midland, will discuss various points in relation to the transport of merchandise; and Mr. William Hunt, Chief Engineer of the Lancashire and Yorkshire, will handle the question of the strengthening of permanent-way in view of the increased speed of trains. The Birmingham Railway Carriage and Wagon Company, the Patent Nut and Bolt Company, the Gloucester Railway Carriage and Wagon Company, the Tubular Frame Wagon Company and many other well-known firms, will contribute, by the way, to the accompanying Exhibition of railway appliances.

PROFESSOR SIMPSON, Director of the School of Architecture, briefly discussed the question of unity between Architecture and the kindred Arts, at a discussion held in the Grosvenor Room of the Spring Exhibition, Liverpool. He said a great truth was expressed in the motto of the Art Workers' Guild of London, that "Art is Unity." In point of fact there ought to be little difference between the preliminary training of architects, sculptors, painters, and Art craftsmen generally. Every advantage was to be gained by their being trained together; without such common training unity among the Arts was next to impossible. If painter, sculptor, architect, decorator, smith, or the designer of pottery, fabrics, furniture, glassware, &c., were trained together, the result would be as in the days of the Renaissance. These artists would modify and strengthen each other. And this was necessary if living Art was the aim.

HAVING urged that Wall Decoration Painting had found its highest expression, Professor Simpson proceeded to say that the supply of real Decorative Art was not equal to the demand, but that the demand would grow larger as the supply increased. If they were good craftsmen, they need not fear but that they would be artists. Mr. Anning Bell also spoke. He endorsed the observations of the preceding speaker as to the need of unity in training. The great point was that men should not learn to design this or that, but to design, to study direct from Nature. Modern design showed nothing of this. Generally speaking, it lacked consistency because it lacked individuality. What we needed to restore was a serious and reasonable view of Art—that Art was not to be acquired by workshop receipts and tricks of method. The aim of the new School was, in short, to teach a man to use his brains as well as his tools.

IN the Crypt of St. Paul's Cathedral, a marble medallion portrait of Sir Robert Montgomery, G.C.S.I., K.C.B., LL.D., has been unveiled by Sir Henry Davies. The medallion, which is the work of Mr. Bruce-Joy, was subscribed for by the friends of Sir Robert in recognition of his services in India during the Mutiny. He restored peace in Oude, and after the taking of Lucknow, acted as Governor of the Punjab for six years, during which period he was knighted. The inscription goes sufficiently into the details of Sir Robert's career and achievements to refresh the memory. It concludes as follows: "Born at Londonderry December 12, 1809, died in London December 28, 1887. In death as in life resting in faith in his Redeemer." The medallion is placed near the grave and memorial of Lord Napier of Magdala, one of Sir Robert's oldest friends.

At a special meeting of the Conway Council, held for the purpose of conferring with a deputation respecting the alleged opposition of the Council to the construction

of the new Bridge over the river Conway at Tal-y-cafn, the vicar of Caerhun, the Rev. W. Roberts, stated that the Corporation's insistence upon the Bridge having a minimum height of 26 feet above spring tide high water, instead of the Bridge Company's proposed height of 16 feet, would probably cause the abandonment of the scheme, owing to the increase in the cost, while river navigation would not be prevented, though delayed a tide, by the lesser height of the bridge. The borough surveyor, Mr. T. B. Farrington, explained the position in some detail, showing that the Council was not itself adverse to the erection of the bridge, but had, as the Conway Harbour authority, made itself the mouthpiece of the river navigators in submitting the question to the Board of Trade for their decision.

THE remains that are being unearthed in France in the construction of the railway from Nyons to Pierrelatte puzzled antiquarians at first, but now little doubt is entertained on the subject. The site is that of the Gallo-Roman city of Augusta Tricastinorum. Everything that has been found, water pipes enclosed in blocks of stone, fragments of capitals and statuary, tiles, large blocks of masonry, urns, amphoræ, indicates the former existence of an opulent city. All vestiges discovered at a depth of ten feet below the surface bear traces of fire. The stones are calcined, the marble and jasper are vitrified, and there are pieces of carbonised wood. The destruction of the city is attributed to the Saracens. After they were vanquished by Charles Martel at Poitiers, an event to which we almost certainly owe it that Britain has never been overrun by Mohammedan hordes, they retreated to the valley of the Rhone, which they held for four years, and completely devastated, under Abderraham, who was supported by the Moorish Governor of Narbonne. If the site is scientifically excavated, discoveries on a much larger scale will almost certainly be made.

ACQUISITION by the Antwerp Museum of the Triptych, "Christ and his Angels," attributed to Memling, has been officially communicated to the Town Council by the Burgomaster. It is to be paid for in six yearly instalments of 40,000 f., of which the first, to the amount of 15,000 f., will be contributed by an anonymous donor, and the remainder by Mdlle. Beernaert, sister of the former Prime Minister.

ON Saturday the foundation-stone of a new Free Library, provided by the Corporation of Birmingham for the inhabitants of Balsall Heath, was laid. The Library, with its fittings, will cost about £5,500, and is being built by Mr. R. Fenwick from the designs of Messrs. Jethro A. Cossins and Peacock. The building, although unpretentious, is decidedly original and decorative in character, and will be a pleasing addition to the Architectural features of the locality. It will cover some 600 square yards, with a frontage to Moseley Road of about ninety feet. The style is English Renaissance, and the façade will consist of three bays, pierced by an equal number of bold elliptically-headed windows, each divided by mullions into five lights. The bays will be surmounted by pedimented gables with decorative niches. On the right will be the Entrance Porch, over which will rise a square Clock-Tower with a height of seventy-eight feet. The materials will be Leicester "sanded" brick, with dressings of biscuit-buff terra cotta. This material will be employed for the decorative gables, and will contrast pleasingly with the green Westmoreland slates used for the roof. According to the designs, it is also introduced very happily for the broken pediment over the Porch, and for the upper

portion of the Clock-Tower. The latter has quadrant corners, and four little domed turrets form finials to them at the base of a miniature octagonal spire. Turning to the left through a Vestibule beyond the Porch, entrance will be gained to the Reading Room, which will have a floor area measuring 57 ft. by 62 ft. The Hall is arranged somewhat in the manner of a nave and aisles, the latter divided from the former by three bold arches, answering to the front windows, carried upon red granite shafts. The central portion of the Hall will be ceiled at the level of the wall-plate, 25 ft. from the ground. The ceiling will be divided by heavy beams with moulded cornices, and a large part of it will be glazed to admit roof light. In the aisle portions the ceiling will be vaulted to correspond with the arches, and the vaulting will be pierced by small lantern-lights. In addition to the floor space already described, there will be, to the rear of the Porch, a recess for administrative purposes, and also a Librarian's room, with a large inspection window. Counter space to the length of 35 feet is arranged for; and shelving, principally on the west wall of the Reading Room, will be provided for about 10,000 volumes. The light-buff terra-cotta will be used for the interior arches, and an ornate low relief frieze of fibrous plaster, 2 ft. 9 in. deep, will run below the ceiling, and form a somewhat striking feature.

AN experiment on a great scale in acoustics was tried at Philadelphia yesterday week in the Baptist Temple, the largest Church building in Philadelphia. The Temple has two auditoriums, one on the lower floor, the second on the one above, where there are besides several smaller meeting-rooms. These were all connected one with another, and with a gigantic telephone by means of wires. The service, the sermon, and the music were all produced in one room, where the large telephone stood near the pulpit and the organ. A large transmitter was placed in each of the other rooms, so that the sermon, service, and hymns were distinctly audible and intelligible to the crowded audiences that filled the other auditorium and the meeting rooms. The success of the experiment was complete.



THE OLD HALL, WORSLEY, MANCHESTER.

EVEN Artists sometimes fail of that intelligent observation in which they think the general public so much lacking. A picture at the current Exhibition of the Society of American Artists was hung upside down at first. It represents a pool of water reflecting an invisible sky and the objects on one bank.

It has been said that save under very exceptional circumstances a woman cannot

become a great artist, and answering the argument of Rosa Bonheur they aver that she has nothing feminine in her character. Be that as it may, the ladies have not only made successful raids of late years on the prizes in the Academy Schools; but they have this year secured a large share in the wall-space of the Exhibition, as the following statistics show: The exhibitors number 1,162, of which the odd 62 may be taken as Academicians and Associates, and the 100 as Architects, amongst whose ranks the ladies have not yet appeared as exhibitors. Of the remaining 1,000, 150 are single and 37 are married ladies; amongst the latter being the following wives of members: Mrs. Alma-Tadema, Mrs. Stanhope Forbes, and Mrs. Seymour Lucas.

A PHOTOGRAPHIC survey of Yorkshire, for the purpose of establishing a record of objects of antiquarian or historic interest in the county, has been put on a practical footing. The Yorkshire Archaeological Society, having had the matter under consideration, are issuing a prospectus to photographers, amateur and professional, inviting their co-operation in the execution of the design. The following passages, extracted from a circular just issued, show the scope and plan of the work: "The chief value of the scheme is, perhaps, the means it affords of preserving accurate representations of both the interiors and exteriors of ancient buildings, so many of which are from one cause or another constantly disappearing from the map; while such objects as monumental effigies or tablets, sacramental plate, sun-dials, crosses, and even remarkable trees, might with advantage be included. It is proposed to arrange the views under parishes, and to secure them in albums of a uniform size, the latter to be kept in the Society's library as books of reference. When, in the opinion of the Council, a sufficiently complete set of views in any one parish has been obtained, such set will at once be mounted, and any additional views in that parish which it may afterwards be thought advisable to preserve, will find place in a second series."

ORIGINALLY there were fifty-four applicants for the post of Borough Surveyor of Wolverhampton, and the Council had the names of the following three candidates before it from which to make a selection: Messrs. James William Bradley, borough engineer, Nelson, Lancashire; John Thomas Eayrs, borough engineer and surveyor, West Bromwich; and Albert Edward Nicholls, assistant engineer in the city engineer's office, Leeds. The applicants by agreement did not appear before the Council, nor did they canvas for votes. In the discussion on the

subject it was stated that the Sub-Committee was unanimous with regard to the qualifications of Mr. Bradley. A number of members, however, spoke in favour of Mr. Eayrs, but the voting resulted as follows:—Bradley, 25, Eayrs, 17. On the motion of the Mayor, seconded by Alderman Gibbons, Mr. Bradley was appointed borough engineer. The salary attached to the office is £450 per annum.

MR. FRANCIS T. W. MILLER has not the face of a humourist, and yet he was the author of two of those sparkling Association burlesques which have hit off, so trenchantly, the little foibles of professional grey-beards. Mr. Miller's paper, "The Queer Side of the Profession," read before the Discussion Section of the A.A. last week, is not in his best form, or, was it that he feared the lance



on its rebound? No one takes these little pleasantries seriously, although good would come if they did. There are dozens of queer things in architectural practice which Mr. Miller could have whipped up for his purpose. How a man can undertake the awful responsibilities of editing such a work as Lockwood's Builders' Price Book and maintain this lighter side of existence sufficient to produce burlesques and other dainty, brainy things, puzzles us; but Francis Miller is a man of resource. We remember—it is many years ago now—travelling to a wayside hamlet in Surrey to measure up the extras of an East End Nobleman's residence. Oh, that measuring! But Miller was ever a demon with a five-foot rod and a tape; and the awful calculations he manipulated were wonderful to a man who has a soul above the cubic capacity of an O.S. gutter. We held the tape. Yes! we admit, with the resignation of a saint, *we held the tape*, and became ravenously hungry in the operation. We were in the land of nowhere—bread and cheese, our highest ambitions, were at least four miles off; but they attracted us, and so, along the dusty road, we started for the "Rising Hope." Presently a hawker's barrow, pulled by a fiery untamed steed, came careering along behind us. Miller's brow set firm. There was mischief mixed up with the cubic capacity of that O.S. gutter. Stop! demanded Miller, standing in the middle of the road and addressing the frightened driver, "How dare you, Sir, journey along the highway of life in luxurious repose, whilst we, the tee-squares and isosceles of our noble profession are padding the hoof? Come on 'to us,' and you, you elongated parallelogram of a sorcerer, drive on to the village pub, and, verily, your reward shall be a mug of foaming sack and a silver shilling." The driver, who had not understood a single word, merely said: "Chuck it, Guv'nor," and winked at us. In the village, we found food, and a delightful old homestead, which we immediately commenced to sketch, and when we had finished it was too late to return to the guttering and the five-foot rod, and so we slept at the "Rising Hope," and plodded back to work the following morning.

ADDITIONS to Queen Mary's Schools, Walsall are now nearly finished. The new buildings consist of two distinct blocks, one containing six Class Rooms, a Dining Room, and a Kitchen for cookery classes for the Girls' School, and the other a Gymnasium, a Workshop, a Laboratory, and a Boardroom. The additions to the Girls' School are built alongside the old Lower School room, which is henceforth to be used as an Assembly Hall, and in this block are to be found rooms for the head mistress and assistant mistress, and the other rooms already named, three of the Class Rooms—arranged to accommodate twenty-four, thirty, and forty students respectively—being on the ground floor, and the three others, of similar capacity, being on the floor above. The additional accommodation provides for 188 pupils, whilst the two old Class Rooms on the other side of the Assembly Room accommodate 36 more—a total of 224 scholars. In the basement are a large Dining Room for girls who may not be able to return home in the middle of the day, a Kitchen for cookery classes, Cloakrooms, and a large Lavatory. All are fitted up with careful forethought for the purposes for which they are intended, and the buildings throughout are planned on the most approved principles. The rooms are lofty, well lighted, warmed and ventilated, the corridors, rooms, and all the accessories are bright and cheerful, whilst substantial in construction. Red bricks are used externally in the construction of the buildings, with a sparing use of Hollington stone for dressings, and, although the decrees of the Charity Commissioners in the matter of expenditure compelled economy, an effective and dignified appearance is produced.

THE Workshop and Laboratory block is placed between the boys' and girls' playgrounds, with a separate entrance from each, and the arrangements are such that whilst the rooms are in use by either School access from the other can be entirely cut off. On the ground floor are a Gymnasium, 47 ft. 6 in. by 22 ft. (which has been furnished with apparatus under the direction of Professor Hubbard, Birmingham), and a Workshop 50 ft. by 22 ft., fitted with work benches, timber racks, and tool cupboards, under the direction of Mr. W. N. Teague, the carpentry instructor at the School and at the Technical School. The first floor contains one bedroom, 22 ft. by 18 ft., having a coned ceiling and an oriel window overlooking the boys' playground; and the Laboratory, which is 37 ft. 3 in. by 22 ft., fitted with chemical tables for twenty-four students, fume closets, combustion hearth, and sulphuretted hydrogen closet. It is claimed for the Laboratory that for its size it is probably the most complete in the district; and the Governors and the townspeople at large have cause to be proud of the additions as a whole. The general building works have been carried out by Mr. R. M. Hughes, Birmingham, from the designs and under the superintendence of Messrs. Bailey and McConnal, architects, Walsall. The total cost will be about £4,750.

HOMES for aged miners is a question that will come before the annual meeting of the Durham and Northumberland Miners' Permanent Relief Fund. Counsel's opinion taken sometime since was that if the rules were altered as suggested, the Society could legally use its funds for the purpose of the proposed building scheme, but the cost could only be met by an increase in the members' contribution. At a moderate computation it would require £80 to build a comfortable Cottage, and as there are now about 2,900 old men on the Society, a Cottage for each would cost about £230,000. These facts will be placed before the members at the forthcoming meeting.

THE Durham Corporation which is being urged by the Durham County Council to dispose of the city sewage otherwise than by putting it into the River Wear, recently offered two premiums of £100 and £50 for the best scheme. There were a number of competitive plans, and those of "Valves" and "Efficiency and Economy" were finally selected. On the seals being broken the names of the successful competitors were found to be—"Valves," Messrs. Lomax and Lomax, Deansgate, Manchester, first, £100; "Efficiency and Economy," Mr. D. Balfour, Houghton-le-Spring and Newcastle, second, £50. The process adopted by Messrs. Lomax is that known as "The International," being by chemical precipitation in tanks and filtration through polarite beds.

SINCE Easter work has been commenced on the London section of the Manchester, Sheffield and Lincolnshire Railway, and is now actively proceeding. Hosts of quaint little houses, situated in quiet, secluded gardens, are now being ruthlessly swept away to make room for this great extension. The scene of ruin and desolation is already great in South Bank, now called Grove Gardens, in North Bank, Alpha Place, Lodge Road, St. John's Wood Road, Wellington Road, Wellington Place, Grove Road, and Cunningham Place. It will probably be a long day hence before London again sees such a gigantic clearing away of house property to make way for a Railway, and it must have come as a great surprise to the inhabitants of this secluded corner of London, when they first had notice of the threatened invasion. The Railway cuts right through the easternmost portion of Lord's Cricket Ground, and sweeps away the old buildings of the Clergy Orphan Asylum, this Institution having just been built by Messrs. A. Waterhouse & Son, near Stanmore. The Passenger Terminus is to front the Marylebone Road, and will be between the upper part of Baker Street and Lisson Grove, quite an ideal site for a great West End Station. We hope the Architecture will be worthy of the site.

THE Schorlemmer Laboratory for Organic Chemistry, which has been provided by subscriptions to commemorate the life and scientific work of the late Professor Schorlemmer, has been opened at Owens' College, Manchester, by Dr. Ludwig Mond. The Laboratory, which has been designed by Mr. A. Waterhouse, is at the end of the main Corridor, in the old Chemical Building. It measures 60 feet by 30 feet, and has an arched roof 30 feet high and is designed to accommodate a Professor, two Demonstrators, and 36 Students. The lower Laboratory is designed to accommodate 45 Students. The fittings are similar to those in the old Laboratory, designed by Sir Henry Roscoe. The Re-agent Room, 20 feet by 20 feet, communicates by a flight of steps with Burlington Street. The total cost of the new building is £4,800.

THE Grand Staircase and State Rooms in Kensington Palace, the birthplace of her Majesty the Queen, are said to be in a dilapidated condition. Sir Samuel Montagu has suggested to the First Commissioner of Works that they should be restored to their original condition, with the furniture, pictures, and other works of Art pertaining to the Royal house replaced.

EVERY effort is being made to proceed with the building of the new Church for Southport, and about £7,000 has been raised. Matters have been further facilitated by the gift of a central site, and of 17 designs sent in for the new edifice, that of Messrs. Preston & Vaughan, Manchester, has been finally selected, and that firm is now busily engaged in preparing specifications and other details.

The new building, which is to be consecrated as Emanuel Church, will be cruciform in shape, with a large Central Tower, and will be built of stone inside and out, the total cost when completed being estimated at about £20,000. Close to the new Church there will be erected a small Chapel.

A NEW issue of bronze coins, now in the Mint, is to be of a design not hitherto used for either pence, half-pence or farthings. The obverse will bear a smaller effigy of Her Majesty than is now struck, and this reduction will make room for a longer inscription. Instead of "Victoria D. G. Britt. Reg. F.D.," the annular legend will read: "Victoria Dei Gra. Britt. Regina Fid. Def. Ind. Imp." The principal words at least are thus presented without abbreviation.

THE lectures of the Sheffield Society of Architects and Surveyors have been so much appreciated during the winter that the Society has extended its rules in order to admit an additional class called "Lay Members" not engaged in the Profession of Architecture or Surveying. These will have the privilege of attending the lectures in the winter, and the opening conversation. They are not to have any responsibility for the management of the Society. The lecture list for next winter includes the names of Messrs. Percy Fitzgerald, Mr. A. Paul Waterhouse, M.A., H.C. Sorby, LL.D., F.R.S., T. Winder, and Hugh Stannus.

THE Lighting Committee of the Brighton Town Council has received fifteen tenders for the supply and erection of boilers in connection with the Corporation electricity undertaking. For six boilers the estimates range from £4,750 to £2,627, the former figure being that of Messrs. H. & T. Danks, Limited, Dudley, and the latter that of Mr. E. Danks, Oldbury. These are for "dry back" boilers. Messrs. Babcock & Wilson, of London, submit, however, a tender for boilers of the water tube type, their price being £3,100, and as the Committee is advised that a considerable saving in space will be secured by the use of this pattern they recommend that a contract shall be entered into with the firm. Tenders have also been received for the supply of vulcanized rubber and lead-covered and armoured cables, and the Committee advises that that of the British Insulated Wire Company at £230 per mile for 3 core cable and £215 per mile for 2 core cable be accepted. In the case of the highest tenders the figures were £396 and £297 respectively.

THE Architect of the Law Courts has much to answer for. He reared a magnificent maze, in which Beatrice Lindsay, of Windsor, lost herself in the pursuit of Justice. She entered the building in search of Mr. Justice Chitty, but could not see him, and at last she found herself called to the bar by a friend, who celebrated the occasion in the usual way. Then she renewed her search for Mr. Justice Chitty with equally unsuccessful results, and at last thought she had better consult someone acquainted with the intricacies of the Law to guide her to his court. She found one in the shape of a policeman, who, instead of taking her to the Chancery Division, led her to Bow Street, where the magistrate adjudicated upon her folly. She pleaded to his Worship: "When I got to the Law Courts I found the passages and corridors so confusing that I thought I had better go to Bow Street and get a good solicitor. I assure you, sir, that the passages at the Law Courts are so perplexing that I got quite mixed up. It's all owing to them." Mr. Vaughan: "You must pay a fine of 5s." And after paying that sum the good old lady may find that Mr. Justice Chitty has disposed of her case in her absence.

FATE has hitherto been somewhat against the Earl's Court Exhibition, and now the opening which was to have been at the commencement of the present month, is perforce postponed to a period which will be much nearer the end. But the Empire of India Exhibition will be well worth waiting for, since it will be one of the most complete and comprehensive shows yet offered to the modern generation of sightseers. The whole thing has been designed and carried out on a scale which characterises Mr. Imre Kiralfy's work, and those who had become accustomed to the site in the days of the old Exhibitions will wonder where all the land has come from on which the vast array of buildings and the splendid collection of gardens have been placed. To begin with there is a Theatre arranged for great spectacles with a Stage a quarter of a mile long, and an Auditorium capable of seating 5,000 persons at a time.

MR. H. G. LUFF, architect, has reported that he has made a careful inspection of St. Mary's Spire, Devonport, and is of opinion that it will be necessary to take down about 10 feet, to remove the dangerous portion. The Spire was built of Bath stone, and he suggested that the portion taken down should be replaced by limestone, which was not so soft as Bath stone. He did not think there was any immediate danger, as the spindle kept the top portion together. There had, however, been a movement of the stone eastward. He estimated it would cost about £100 to do this work. A discussion ensued, in the course of which Mr. Luff offered to hand over his professional fees to the Churchwardens. Ultimately a Committee was formed to consider the best means of raising the money to take down and rebuild the upper part of the Spire.

THE Vallance Estate at Hove, Brighton, is developing very rapidly. Allotment holders on that portion of the estate between Portland Road and Church Road have received notice to quit, and the plans have been prepared for the roads which are to be made at once. No terrace houses will be allowed to be built, erections being confined to residences of the value of £800 or semi-detached houses of the value of £750, exclusive of the value of the land. There is a 30 feet frontage to each plot and an average depth of 125 feet.

FREQUENT representations have been made to the County Council, and plans have even been prepared, for the construction of a broad avenue connecting Holborn with the Strand. Hitherto, however, no active measures have been taken by that body, and, with the object of again stimulating the authorities at Spring Gardens to action, a Deputation representing ratepayers in the two divisions, waited upon the Improvements Committee at the County Hall. In the unavoidable absence of the Recorder Sir Charles Hall, the Hon. W. F. D. Smith, M.P., acted as spokesman, and urged the desirability of some scheme being formulated which would remove present grievances. The Deputation

had not, he explained, been instructed to favour any particular proposal, but desired only to point out the inconvenience experienced by passengers between the Railway Termini in the north and the south by way of Waterloo Bridge. Certain owners and occupiers of property in the neighbourhood also suffered considerable anxiety, owing to the fact that a notice, served upon them two or three years ago, of the possible formation of a new street, was still hanging over their heads.

A NEW Warehouse of gigantic dimensions is a proof that the Cheshire Lines Committee see not only a great future for Liverpool trade, but also a rehabilitation of the shipping industry on a considerable scale in that portion of the city where their special enterprise has found for itself a habitation and a name. The Warehouse is bounded on the north by Northumberland Street, on the south by Park Street, on the west by Sefton Street, and on the east by Caryl Street. It has a frontage of 600 feet, directly facing Brunswick, Toxteth, Harrington, and a portion of Herculaneum Docks. The width of

ANOTHER Lunatic Asylum, that built by the Sunderland Town Council at Ryhope, is now completed. Hitherto the Sunderland patients have been accommodated at the County Asylum at Sedgfield. The Asylum is the most valuable piece of property which the Sunderland ratepayers possess, as the Municipal Buildings, including site, only cost about £50,000, and Wearmouth Bridge a little less, while the cost of the Asylum will, it is expected, exceed £100,000. A commencement was made with the building in November, 1893, on a site comprising 75 acres, which the Sunderland Corporation were fortunate to get at the remarkably low figure of £9,000. Mr. J. Howe, of West Hartlepool, had charge of the contract, and has finished his work well within time, June 30th being the limit allowed by the County Council for the Sunderland patients to be removed from Sedgfield. The plans provide accommodation for 350 patients, capable of extension up to 500. It is estimated that 280 patients will enter upon immediate occupation. Dr. F. A. Elkins, late of the Morningside Asylum, has been appointed Medical Superintendent, and he has about 50 subordinates. The following are the principal items of cost in connection with the Institution:—Land, £9,000; Foundations, £9,000; Superstructure, £61,250; Electric Light, Heating, and Ventilation, £8,000; Laying-out Grounds, £500; Furnishings, £8,000; Clothes for Patients, £1,400; Total, £97,150.

THE City Authorities of Newcastle-on-Tyne, having abolished the old signal gun, which was fired by electricity from Greenwich each day at one o'clock, placed a large bell in the Tower of St. Nicholas' Cathedral, the intention being that this should be sounded at the old gun-hour. It was found, however, that the present clock in the Tower was not powerful enough to raise a hammer of the proper size and weight. The Corporation have placed an order with Messrs. Potts and Sons, of Leeds, for a new clock

and this is now ready for forwarding. It will, it is said, be the largest and finest clock of its kind in the provinces. The time signal portion has an arrangement fitted so that it can be discharged by the Greenwich time current at one o'clock, the other striking part being rendered silent at that hour.

THOSE who had the good fortune to see the Manchester Art Treasures, in 1857, will probably remember Mr. Wallis's picture, "The Death of Chatterton," a work that created a sensation when first exhibited at the Academy a year before it went to Manchester. This painting, we hear, is destined to belong to the nation, its present owner, Mr. C. C. Clement, having promised to present it to the National Gallery.

At the general assembly of the Royal Academy, Mr. J. W. Waterhouse, A.R.A., was elected R.A. Mr. Waterhouse is well known as one of the most gifted of our romantic painters, and his "St. Cecilia," in the present Exhibition, has already been praised as one of the finest works now to be seen at Burlington House.



ARCHITECTURE AT THE ACADEMY.

the structure is 105 feet and the height 70 feet. The building is of massive proportions, and has an imposing appearance, the lettering of the names of the various lines constituting the Cheshire Lines Committee being of gigantic size. The Warehouse is an addition to the goods accommodation which has existed so long there, but it is built on a scale, and with such evident improvements in many ways, that it quite eclipses not only the old Station in size and style, but may well claim to be one of the best, if not the very best, Warehouses in Liverpool or any other city, either in Great Britain or elsewhere. A visit to the premises showed that all that architectural, engineering and Mechanical skill can do to give efficiency and easy manipulation has been expended upon it. The walls, the supports, the floors, are all of the most solid description, and all the appliances fitted up for the handling and the transshipment and storage of goods are such as the most recent up-to-date ideas can suggest. The structure is practically incombustible and imperishable, held together with such a wealth of iron that nothing short of dynamite or heavy shot could imperil its stability.

AN INTERNATIONAL SERIES OF ILLUSTRATED ARTICLES.

TO OUR READERS.

In our early numbers we hinted at our intention to introduce Illustrated Articles on current Architecture as a further feature in "THE BUILDERS' JOURNAL."

We have, therefore, pleasure in announcing that we have arranged for a series of

IMPRESSIONS.

upon the Architecture of the chief cities of Great Britain and Ireland, of Germany, France, Italy, Spain and America.

These Articles will be finely Illustrated, and will appear in conjunction with "Our Men who Build" series, which we shall also make

INTERNATIONAL.

We shall be obliged if our readers will aid us in making these facts known.

THE BUILDING TRADES' CRISIS.

ARBITRATION REFUSED.

THE outlook in the London building trades has suddenly darkened, and the danger of a great struggle during the present summer has increased. It will be remembered



A VIEW OF DEANSGATE.

that the 1892 agreement came to an end on May 1st last, owing to the expiration of the six months' notice given by the master builders last November. Whilst that notice was running several conferences were held, at which the master builders endeavoured to introduce two new rules, one of which provided for sub-letting, and the other for the harmonious working of Union and Non-Union men. These rules were not accepted by the men, and the master builders have since offered to submit the two suggested rules to arbitration, and to continue the 1892 agreement until June 1st next, providing an arbitrator is agreed upon before that date. This proposal has been submitted to a ballot of the various trade unions in the London building trades, and has been rejected with almost complete unanimity. Since then a conference of delegates from these unions has been held. What has been the result of that conference has not been made public, but it is believed that an intimation has been conveyed to the Central Association of Master Builders that the men decline to arbitrate on the question of sub-letting, that they will insist upon the terms of the 1892 agreement being observed in future, and that any departure from that agreement will be strenuously resisted. It is stated that there is a strong feeling amongst some of the building trade unions at once to strike all the shops and jobs of those members of the Master Builders' Association who decline forthwith to again sign the 1892 agreement.

The Builders' Journal.

IMPRESSIONS.

NO. I.—MANCHESTER.



HEAVINESS and dullness, almost fierceness, about its Architectural surroundings—characterise the Metropolis of the North, as a first impression. It takes years to know your Manchester. It has depths you never fathom; a forlornness you make no effort to penetrate, but until you do—until you get well beneath the mere aspect of things—Manchester is just as commonplace, as prosaic, as grimy, as any other great town. The Domestic Architecture of the Great Cotton City may be summed up in a sentence—it has none. Where the mighty millionaire and his satellites foregather no one knows. They seem to disintegrate when the money-making hour is dead, and roll away like little dust drops to their wigwams in the suburbs, unknown, unhonoured, and unwashed. On my last visit to Manchester, an incident was told me by mine host of mine Inn; a worthy man indeed, with a reputation. He was a German, but twenty years of English life had improved him into a decent fellow. A citizen called upon him one day and queried

the price of a good dinner for a party of guests. "How much a head?" said the visitor. "From ten shillings to five pounds," replied the landlord. "Well then! dinner for twelve, at the higher fee." Now dinners at five pounds a man are not too frequent on this Universe. On the eventful night mine host—gorgeously spiced and span—awaited the coming of his visitors. The drive-up had been freshly gravelled, and the hall porters were up to their work. Presently a voice

accosted him across the corridor, "Any of my friends here yet," and turning, the astonished hotel keeper discovered the host of the evening trimming his nails with the wrong end of a lucifer, and asking one of the servants, "where he could get his boots blacked?" The giver of the feast had turned up in his every-day garb; and so did his guests.

There is no stupid pride about Manchester men, and little more can be said about its Architecture. Alfred Waterhouse, R.A., commenced life in Manchester and for that we must be thankful. His Town Hall, built at a cost of nearly a million-and-a-quarter of money, is naturally a magnificent pile and would be a beautiful one had a material been used

which would not have sucked up the grime and filth of the city atmosphere. At present it is jet black with only the joints of the masonry shewing white. The style is Waterhouse Gothic, and students of other men's work know what that is. The building does not possess the refinement of much of its Architect's later work, but all his old



THE ENTRANCE TO THE TOWN HALL.

trickery of design, the quips and cranks of a wonderful master-draughtsman are apparent at every turn, and the internal arrangements of the general floors are almost wonderful to contemplate. Had Waterhouse planned no other building but the Town Hall at Manchester, he would have stamped himself as a remarkable man; but his Assize Court in Strangeways, built some thirteen years before the Town Hall, is much more Gothic in feeling and, therefore, the more unsuited to secular building. The celebrated Owen's College is perhaps really Waterhouse's best building in Manchester, but his Refuge Assurance Offices in Oxford Street, is a remarkable application of terra-cotta. The fronts are a mass of the most extraordinary and intricate detail this much abused material has ever had to encounter, but the colour, a rich deep leather brown is quite suited to the locality. If the Refuge ever tumbles to pieces, it is to be hoped that it annihilates the Palace Theatre of Varieties, on an opposite corner—the most fearful abortion of coloured cement work any civilised city could tolerate. Sir



OWEN'S COLLEGE: A. WATERHOUSE, R.A., ARCHITECT.

Charles Barry is represented in Cottonopolis by the City Art Gallery and the Athenæum, the former of which was erected five-and-seventy years ago. It is a good and spacious building in Barry's sober methods, and, on my last visit, harbouring a delightful collection of Art-mongery I would personally give half Manchester to possess. In Gallery E, for instance, amidst the most beautiful pottery—unhallowed by the touch of centuries—almost warm from the kiln, so modern is it, so new, one feels that one could wander for days and never tire. The man who sees beauty in merely old things and refuses to recognise it in the merely new, would not trouble to visit the present Exhibition in the Art Gallery at Manchester, but for me and my creed, I am content to dwell among the men who have made much of the Doulton ware and the Maw ware, the tiles of Pilkington, the dado designs of Lewis F. Day, the pottery of the Della Robbia Company, and the potters who have glorified Walter Crane's delightful vases. Of the remarkable permanent collection of modern masters in the rooms of the first floor of the Art Gallery, I could write much, but not here. Many an hour have I spent studying these gems which—if I know aught of Painting—will prove the wisdom of Manchester's choice. To an Architect the series of Prout's water colours will give much enchantment; and was it not Ruskin who said: "There is no stone drawing and no vitality of Architecture like Prout's?" But one is of necessity not always Architectural. Did Yeames ever paint a finer canvas than his Prince Arthur and Hubert? Was there ever a nobler piece of design—for it is design—than Ford Madox Brown's "Work"?

"Which bends the brow, and tans the flesh of lusty manhood, casting out its devils; By whose weird art, transmuting poor man's evils. Their bed seems down, their one dish ever fresh."

Did Watts ever surpass his "Prayer"? Was Goodall ever so truthful as in "The Water of the Nile"? and did Rossetti ever reach so closely the sublime as he did in "Astarte Syriaca"? If he did I have not seen the work, and I have seen most of all he ever did. Of David Cox and Copley Fielding, De Wint and Etty, of young Arthur Hacker's "Syrinx," of Edwin Ellis's—erratic Edwin Ellis's—masterpiece "The Haven under the Hill"—and such a hill, and such colouring, unsurpassed by any living artist and unequalled in his blues by any who is dead—of Leighton's superb "Captive Andromache" I may not dare to speak, when Manchester has slums to be slummed, and sewage work to be surveyed.

Of the Royal Exchange one must say

something. However impressive it may be within, nothing but the Portico impresses me without. The Post Office, designed by Mr. Williams, of H.M. Board of Works, about fifteen years ago, is a much finer building, and altogether excels London's wretched St. Martin's-le-Grand and its impure offspring on the other side of Aldersgate Street.

Of one aspect of Architectural Manchester there is no two opinions. The warehouses are unquestionably the finest in England. One has only to walk down Portland Street, which runs from the Infirmary—the central site of the City—to Oxford Street, to gather a conception of what Warehouse Architecture

are disgraces to civilisation, though they may be a credit to Engineering skill. The Churches—with but two exceptions—will never flatter the pages of an Architectural sketch book.

The Cathedral itself has the worst situation of any Cathedral in the Kingdom, but until half a century ago it was merely the Collegiate Church. It was Thomas de la Warre, who, besides being the twelfth Baron and Lord of the Manor of Manchester, was also a priest and rector of the parish, "bethought himself, as well for the greater honour of the place as the edification of the people," to erect such a Church, which was dedicated to St. Mary. Mr. J. S. Crowther, the Cathedral

Architect, who has carried out the restorations and enlargements, which have been in progress during the past twelve years, has more than once called attention to the "stalled Choir of exquisite beauty," which is unquestionably the finest part of the Church. The Tower, at the East End, is but a poor affair, although rebuilt as late as 1864, and perhaps the South Front is the best. During the last sixty years considerably more than £80,000 has been expended on the fabric, and a sum equally large is required to be spent in making it, with its approaches, worthy, from the Architectural sense, the "second City" of the Empire. No sum, however large, can release it from the bondage of a hideous railway station which, with its fearful bridges and accessories, will for ever choke the artistic life out of what might otherwise have become a really beautiful Church. Almost the only historic building left in Manchester is Chetham College, quite close to the Cathedral, and worthy of a passing visit.

And so much for detail. English cities, indeed, depress the mind of a searcher of the Beautiful. If one could alter these things which *do* depress, the effort were worth the time; but as it cannot

be, the time is too precious to waste. Commend me to the "view" which faces a traveller entering Manchester from any of its great railway termini. Words cannot convey the Architectural depravity of such, and so let it rest. There seems to be in the City a fine field for good Architectural work; but we know how it will be devastated. If only architects would be a little less original and a little more compatible. If they would, for instance, occasionally sustain the horizontal lines of their next door neighbour instead of starting new horizontals of their own, a very big step would be advanced towards a certain uniformity of principles which might



THE TOWN HALL, MANCHESTER: ALFRED WATERHOUSE, R.A., ARCHITECT.

should be. London can shew nothing to compare with these serious sober blocks of masonry or brickwork, quite refined in their "features," and giving to the whole place a strong sense of commercial stability. King Street is the Bond Street of Manchester—and, socially, but a poor representative. Market Street, Piccadilly and Deansgate are the great commercial thoroughfares. In the latter Mrs. Rylands is erecting her Library building, in which to place the noble collection of books purchased from Lord Spencer some few years back. None of the Theatres call for any Architectural comment; they are airy and spacious structures and nothing more. The four hideous Railway Stations

lead to better things. But Manchester suffers, as other cities, from the snippy, snappy originality of very unoriginal minds; and it almost seems that until the socialistic tendencies of modern manners lay their fingers on the Art side of other people's affairs, and compel building owners to build under some code of artistic consistency, in which harmony is of a little higher value than mere originality, our street Architecture will remain what the Victorian Age has made it.

Manchester is a city of wealth and vile sanitation. At the end of the Nineteenth



ASYLUM FOR THE BLIND, MANCHESTER.

Century it tolerates urinals of the most primitive kind and of the most public nature, which offend the sense of even strong men of the World. Its public conveniences in its main thoroughfares would not be permitted in a Rotterdam slum. There are hundreds of cottages with no better sanitary arrangements than unholy "biddens"; one "bidden" to a couple of dozen families, in common use of men, women, young girls, and children. Manchester reeks of soil carts, which, after midnight, commence their ghoulish work. The sanitation of its domestic dwellings is a horror. Manchester is a city of cotton which is white and sweet. It can spend a million and a half of money on a Town Hall, and find £15,000,000 for a canal, and it knows not the very rudimentary rules of Sanitary Science.

I lunched at the Reform Club not very long since, the guest of an eminent citizen, and was congratulating him on the acquisition of Mr. De Courcy Meade as the City Surveyor.

"Ah! my friend," he replied, "Mr. Meade has come ten years too soon. Manchester has no knowledge of sanitation."

"All the more reason why he should be here."

"Perhaps; but Manchester won't learn."

SOCIALISM v. ARCHITECTURE.

NOW and then it is interesting to read what other and non-professional Journals say of Architecture. "The unerring test of a people's true happiness," the *Clarion* calls it. Our contemporary is spirited and picturesque, but not always practical. Yet its Socialism is not the "mess of pottage" policy of some. It has its ideals and aspirations. "Socialism will be impossible without good Architecture," our contemporary goes on to say. "Good Architecture is impossible without Socialism. And so it is of all the Arts, of all good and beautiful things; they are bound up with Socialism, and it is bound up with them. Don't let us forget that. Socialism means the application of the eternal principles of Truth, and Love, and justice to the Whole of Life, and not to the machinery of production only. Socialism is not higher wages, and shorter

hours, and municipal gasometers; it is not economics only, or ethics only, but it is Love and Truth in *everything*. That is the difference between the old trade unionist and us. We are working for Socialism, and for nothing short of that. When we have got thirty bob a week and an eight-hour day as a minimum (if we do get even that without Socialism, which I doubt), we shall still be insatiably asking for more. We shall, I hope, be even more discontented than we are at present. And, as long as we have beastly towns to live in, and smoky ugly things around us, we shall be as divinely discontented as ever. There are two men whose work has been—and will be still more—of peculiar importance to the Cause.

They are John Ruskin and William Morris. Both began with Art, and both came to see that Art would be impossible without Brotherhood. They both applied a marvellous feeling for Beauty, and an intimate knowledge of past history, to modern problems; with the result that they overthrew the whole dismal structure of English political economy, not without leaving in its stead the foundation of a better science, a science that shall be co-extensive with Life. And they both attach the greatest importance

to the Art of Architecture, and have shown by the records of the past how inextricably it is bound up with the welfare of the people. Therefore let all Clarionettes who are in any way connected with the building trade (*trade* is an ugly word, but we *daren't* talk about the 'Art of building' nowadays), and let all who have any voice in the creation of buildings, public or otherwise, read, mark, learn, and inwardly digest Ruskin's 'Seven Lamps of Architecture,' and Morris's 'Signs of Change.' For the Art in which they are concerned is the most indispensable of all. We might do without pictures, and music, and poetry for a while; but Architecture, of some sort, we must have, places to live in and to meet in. Now here we have a good instance of the thralldom of Art, and of Labour, to Commercialism. Every true artist feels an instinctive terror at the idea of iron supplanting stone and brick and wood. He knows that the beauty of buildings and of cities comes from their subtle proportions, their structural integrity, from the sense of solidarity and of immovable strength, from the record of Life upon them and the mellowing touch of Time. Yet the artist is powerless. He may protest, but the age of iron, he is told, is upon us."

[We, at least, *dare* talk and *write* about "the Art of building" with sincerity and conviction. We believe in it as an "Art." —ED. BUILDER'S JOURNAL.]

LABORATORIES have now been provided and furnished in Ashton Street, Liverpool, in connection with the University College, and are now ready for use. The building, which will be known as Ashton Hall, was formally opened on Saturday last.

THE NEW UNIVERSITY HALL.

ANOTHER LONDON "SETTLEMENT."

THE new buildings of University Hall, Gordon Square, for which a competition of twelve architects is now at work, will consist of a public building, containing Concert Hall, Library, Gymnasium, Class Rooms, Workshops, Billiard Room, &c., and a Residence for the accommodation of eighteen residents and a warden. Mr Norman Shaw, R.A., will act as honorary assessor to the Committee in the matter of the plans for the new buildings, and it is hoped that building may be begun some time in the autumn. An admirable freehold site has been secured on the Bedford Estate, at the corner of Tavistock Place and Little Coram Street, and the Committee speak in their appeal of the kindness of the Duke of Bedford, who has taken much personal trouble and given them every facility. The total cost of the Site, Hall, and Residence is expected to be about £20,000, of which, including Mr. Passmore Edwards's gift of £10,000, £12,000 has been now collected. The new Settlement will stand as it were, on the boundary line between Eastern and Western London. It will look eastwards over Pentonville and Clerkenwell, and will be in close relation to the crowded neighbourhood of King's Cross, Burton Crescent, and Somers Town; while, at the same time, it will be easy of access from the west. It is expected that the new buildings will open with a body of some hundreds of working men and women closely attached to the Settlement by means of the work now being carried on at Marchmont Hall, and the Committee hope to make this body the centre and starting-point of future activities. The religious aim with which University Hall was founded will be carefully maintained. Under the new articles of association the Committee will be bound to devote some of their resources to an improved teaching of the Bible "in the light of modern knowledge and research," and a fresh Lectures Committee, on as broad and representative a basis as possible, is now in process of organisation. The House of Rest Scheme also, in which Sir Edward Burne-Jones has promised cordial co-operation, will provide, when carried out, a shelter for the religious activities of the Settlement, where, however, the general social work will be wholly dissociated—as it has been till now—from any special form of religious propaganda. The new Concert and Lecture Hall will be called the Jowett Hall, in memory of the late Master of Balliol; the Residence will be called Emerson House; and the Library, by Mrs. Green's consent, will be known as the Green Library, in memory of the late Professor T. H. Green.

A NEW National School for Boys, at Great Harwood, has been formally opened by Mrs. Adam Dugdale, of Griffin Lodge, Blackburn. The School has cost close upon £1,800, and will accommodate 250 scholars.



THE EYE HOSPITAL, MANCHESTER.

"THE QUEER SIDE OF THE PROFESSION."

By FRANCIS MILLER, A.R.I.B.A.

A Paper read at the Architectural Association.

WHEN the mandate from your Committee, to read a paper before the Discussion Section, reached me last August, I was in Devonshire—in one of the leafy recesses of that delightful county unknown, at present, to speculators—one of those umbrageous solitudes where it is still possible to stretch oneself on the green turf, and bask in the sunlight at the feet of immemorial elms, with no companion save an ounce of birds-eye and Gwilt's Encyclopædia in thirteen volumes. Secure in the consciousness that if one's eyes should perchance stray from the magic pages that they will not encounter some dire portent of coming evil in the shape of a notice board announcing that this eligible building land is to be sold as a whole or in plots.

I was—if you will—snatching a brief interval of repose from the toils of an arduous profession, or, may be, filling up the time because I hadn't a blessed stroke to do—which ever you like.

Let us, without minutely sub-dividing the subject, cutting it up into stories, as it were—from the basement of fact to the attic of fiction. Let us begin with the solid and substantial statement that there is no "queer side to the Profession," lest these words may act as a species of damp-proof course on your hopes of a discussion. I hasten to say that whilst there is no queer side to the Profession itself, there are undoubtedly many queer sides to some of its Professors.

Why, for instance, should a certain practitioner, who might claim a passable standing as being conversant with matters of dilapidations and compensations, seek rather to shine before an astonished World as a full-blown Professor of Architecture?

Or why should a mild-mannered young gentleman occupying (worthily enough, no doubt), an office stool in Spring Gardens, and having presumably no intimate acquaintance with the myriads of craftsmen here and abroad, past and present, select for his paper such a title as "the inefficiency of the modern workman," and then forthwith proceed to take the Universe under his protection?

A late professor of the mysteries of Ecclesiastical Architecture (who is no longer with us), one who was in his day as a pillar of fire to the select band of mediæval pilgrims journeying through the desert of Modern Construction, once publicly gave thanks for that he had never used a girder!

At a meeting at Conduit Street, when someone hazarded the remark that a knowledge of drainage might, peradventure, prove of use to an architect on his way through life, did not a prominent disciple of the latest new School amongst us lift up his voice in lamentations, and—like Rachel weeping for her children—refuse to be comforted?

And to come nearer to each of us here assembled, once upon a time, did not one of our little band, in the pages of our own "A.A. Notes," turn up his æsthetic nose at such vulgar things as gas and electricity as illuminants, and, after coyly admitting a penchant for oil lamps, confess finally to a yearning for candles—whether plain or coloured did not clearly appear, but it was essential they should be stuck in sconces?

The effect of combining the functions of architect and editor in the same person is also at times productive of strange results. We have lately been treated to the spectacle of the editor of a well known professional journal coming forth from the mysterious obscurity that surrounds all editors and publicly reading a paper on Bridges, or some topic of that kind. Strange to say, the various rival journals preserved a strong silence on the subject, making no mention or report of the event until the editor of one of them, having incautiously offered to print an account of it was at once told by Editor No. 1 that if he did so he would lock him up or put him in Chancery or something of the kind. After this one is not surprised to hear that our President missed his umbrella twice lately.

Further specimens selected from our records

might be exhibited if it were necessary to prove the existence, here and there, of these bumps of queerativeness, as a phrenologist might call them.

These abnormal incrustations, however—these accretions or moral protuberances—whilst sufficiently remarkable in the individual become yet more so when the individual is merged in the corporate body! The effect then produced is somewhat in the nature of a kaleidoscope, and like as each tiny bit of dull glass, which would else have passed unnoticed then becomes, when duly confined within circumscribed limits, and under the hands of a skilful operator, a potent unit in producing the most extraordinary combinations, so does the average man, when mixed with his fellows and duly shaken up, become a marvel to himself and a puzzle to beholders.

There still exists, I believe, in connection with Architecture, a custom of bestowing annually a crown of gold or golden medal, I forget which. This bestowal, unlike the Paris Rosière, which is for the reward of virtue (a somewhat scarce commodity perhaps in Paris), is an institution for the recognition of Architectural merit. That, at least, was the intention of the pious founder, and the onerous duty of adjudicating upon the many and varied claims to the possession of this important qualification is left to the Council of the senior Architectural body. The method of selection adopted for the most part by these portly and rotund descendants of Inigo-Jones possesses at least the merit of simplicity, inasmuch as they gravely present this valued trophy to each other in turns; calmly ignoring the existence of men who have done something at least to advance the cause of genuine Art. Such indifference to all outside the conventional ring is ludicrous, if you will, but approaches the sublime in its lofty effrontery.

It is this failure to see any merit or ability outside a limited circle, this exclusiveness of feeling that perhaps accounts for the existence throughout the kingdom of so many independent bodies as there are; almost every large town having its own local Architectural Society or Association, each cut off from the other in proud isolation. Thus, whilst the doctors, the lawyers, the engineers, and the surveyors, are each severally governed by practically one central body exercising a control over the whole profession, architects seem incapable of union, and resemble rather so many Hal's o' th' Argud, each fighting for his own hand.

It is now, I understand, becoming the custom for the large upholstering and drapery firms to keep "an Architect" on the premises.

It is also a mere commonplace that most of the large estate agents and auctioneers have what they are pleased to term an Architectural department. The Army and Navy and Civil Service Stores also undertake to supply their clients.

A friend of mine—a clever able man and an Associate of the Institute—had amongst his clients a banker, who thought of erecting for himself a small country house. An appointment was made at which the proposed building was discussed, finally the matter was adjourned for a few days to allow of my friend putting his ideas somewhat into shape. The banker's wife at the conclusion of the interview, saying very innocently and cordially, "Well, good-bye Mr. So-and-So, we shall see you on Monday then, and you will bring your book of patterns with you."

When this is the estimation in which Architecture and Architects are held by the average ratepayers, it is a matter of small wonder that the Press, both daily and weekly, plain and pictorial, with few exceptions, practically ignore the very existence of the Art and its professors both, in proof of which one has only to turn to the average account of the opening of any public building to find that whilst full particulars of everything appealing to the commercial instinct is given, such as the cost of the site and the building, whether the latter is heated by hot water or lighted by electricity on somebody's patent principle, or that the chaste and elegant furniture was supplied by an eminent Tottenham Court Road politician, no allusion is ever made to the artistic aspect of the structure good, bad, or indifferent. That whilst the speeches and names of the Committee or the ornamental persons specially deputed to declare

the building open are given in full, that of the designer of the edifice to do honour to which they are all met, is seldom or never mentioned.

At the opening of the Imperial Institute there was, as everyone knows, a grand ceremony, and, with a careful eye to spectacular effect, an imposing procession was arranged comprising all sorts and conditions of persons connected with the affair. The position of each in the show being governed by his relative importance. And where did the Architect appear? Nearly last, walking between the Clerk of Works and an Under-Secretary, coming in at the tail end of the usual string of trumpery German Princes, Serene Transparencies, Military Officers and titled Committeemen.

It has always been a cause of personal wonder and regret to many of us that Mr. Colcutt did not better consult his own dignity and that of his profession by remaining at home, rather than consent to occupy such a subordinate position.

Sir John Millais, at the late Royal Academy Banquet, remarked that no one could contemplate without a shudder the prospect of a new public building being erected by the Government. This is scarcely to be wondered at when one remembers that, for a long period, it was the custom to place as much as possible of this kind of work in the hands of military officers or departmental officials.

However, we must take the World as we find it and do the best we can with it. For most of us the chief of the seven lamps of Architecture is the lamp of getting a living, and very curious are the devices sometimes resorted to in order to keep this particular lamp trimmed and burning. I knew one man who by day was a "ghost" to a well-known architect, but who wisely devoted his evenings to the cares and emoluments of a suburban boot shop, which he carried on by the aid of his wife. Another worthy old gentleman, now dead, was a district surveyor, with which calling he combined the functions of a bill discounter and money lender on notes of hand. Some men design for the furniture shops, others, with a greater love for the open air, speculate in land; the real wonder being how all contrive to exist. Indeed, when one considers the shoals of aspirants constantly pouring into the Profession, and casts a glance, when walking abroad, on the great and constantly increasing number of brass plates adorned with the magic word "Architect" that grace the door-posts in all directions, one is tempted to wonder what the end will be; whether the members of the Profession will adopt some process of decimation—the selected victims being given the run of the jobs and allowed to fatten on wealthy clients for say a month, and then led forth to slaughter, amid rejoicings to the sound of shawm and trumpet—or whether some arrangement will be mutually arrived at, akin to that which is understood to be in force among the keepers of the endless restaurants of Paris, in virtue of which each dines at the other's café in turn; and thus trade circulates and all flourish.

The real truth is that the Profession has for some years past been getting too respectable. Schemes of education, examinations, certificates, diplomas, public assertions of the high and lofty nature of an architect craft have at length done their full work, and fathers of families have at length awoke to the fact that our's is a genteel occupation, one which it is occasionally possible to make money and get knighted, and as more cannot be hoped for even by a City Alderman, the result is that numbers of youths who would in the ordinary course of things have gone into a City counting-house, have been duly articulated to some premium-hunter, to be turned loose later on to shift for themselves and swell the ranks of the Unemployed.

Probably you will expect me not to conclude these disjointed remarks without a moral of some sort. I freely confess that I am not good at morals. But don't worry yourselves as to whether our's is an Art or a Profession. The great men who reared the fabrics of which to-day the whole World is proud would have stared if you had asked them such a question. Do the best that lies in your power, every good piece of work will bring its own joy and reward with it, and remember that if you cannot always design with beauty you can always build in Truth.

NEW PUBLIC HOSPITAL AT SHEFFIELD.

THE OUT-PATIENTS' WING.

THE new Wing of the Sheffield Public Hospital, opened by the Duke and Duchess of York, has a terraced elevation of 173 feet by 52 feet, and is English Renaissance in style, with an external appearance as graceful as the internal arrangements are scientifically complete and sanitarily effective. The plan of the proposed new building, of which the Out-patients' Wing has just been completed, is in the form of the letter E. The block which is the Out-patients' Wing, constitutes about one-third of the whole building scheme; the Administrative Department will be entered by a spacious Hall, and here also will be the Main Staircase, the room in which the meetings of the Board will be held, the Secretary's Office, Porter's Residence, Matron's Office, and other accommodation. The other Wards will be divided by spacious Courts, and opposite them, but separated by an extensive Courtyard nearly 200 feet in length, is the site for the Home, which is to accommodate between 40 and 50 nurses. The Out-patients' Wing has a fine entrance up a flight of gently sloping steps, laid at such an angle that the bearers of the ambulance may enter with the least possible exertion. Columns of Derbyshire marble, capped with alabaster, flank the entrance to the Corridor which immediately faces the Main Entrance from the street, and goes direct to the room, a few yards distant, where casualties are to be treated and small operations performed. The science of Hospital building has been described as a place that can be easily washed and cleansed, and the architect has elaborated on this idea in designing this Casualty Room. It is octagonal in shape, well lighted from the ceiling, and lined with a particularly hard marble which will reflect light. This marble is of a kind extensively used in the construction of Italian Buildings. In addition to being used to line the internal walls, the tables and basins for operating purposes will be made of it, and as there is nothing to spoil, the Casualty Room and a small Retiring Room for private examinations, which lead out of it, may be thoroughly cleansed. Should a very serious accident case be brought in, there is an apartment near the Casualty Room which has been expressly designed for the reception of this class of injuries. It is entered through wide doors, and will contain everything necessary for the purpose for which it is set apart. The Waiting Rooms are near the entrance, women to the left, men to the right, and with their comfortable seats and warm, well-ventilated atmosphere, they will be an immense improvement upon the inconvenient and crowded Hall used for a similar purpose in the old block. From these rooms patients will pass in rotation into the Consulting Room of the physician or the surgeon. Leading out of the Consulting Rooms are small rooms in which patients may be examined privately, and there is also a Dark Room for the benefit of those suffering from ophthalmia. This spacious Hall, which is near the principal entrance, has seating accommodation for 150 patients. Electricity will be called into use in the new building to a greater extent than hitherto, and a room which has been specially provided for the treatment of patients, is to contain electric batteries and other appliances. It is near the rooms which constitute the Dental Department. These rooms, like all the rooms in this extension, open out of the Main Corridor, nine feet wide, which runs a length of 173 feet, and constitutes a great fresh-air lung. In building the Wing there has not been much opportunity for artistic treatment, but the architect has carefully studied points of more importance. The building has a groined dome ceiling, whose graceful lines and bright appearance give pleasure to the eye. The floor is of *terazo*, a kind of marble mosaic, with very durable qualities, and which has the additional advantage of being kept clean with a minimum of trouble. The same principle is developed in the Architecture of the large Wards on the floors above. Between each of the eighteen beds the Wards will respectively contain, is a large window opening into the Court. These

windows are of the *louvered* pattern, which allows each sash to be reversed, so that they can be cleaned from the inside, without the servant resorting to the dangerous practice of sitting on the outside ledge. The private rooms of the resident medical staff are in the Corridor near the Centre Ward. These rooms looking out into the street are separated from the Sick Wards by a Grand Corridor of communication, and at each end of this broad, handsome way there are emergency staircases, which, like the ceilings, are composed of a peculiar kind of fire-proof concrete, laid on steel girders, and covered with polished teak blocks, whose hardness is proverbial. The same kind of material has been used in the construction of the floors of the upstairs rooms. The Wards are heated by low pressure hot-water pipes and warm-air stoves, and slow combustion stoves. The Principal Fronts of the building are faced with thin Skiers' spring bricks, which are hard and impervious to moisture, and oolitic stone from Weldon, Northamptonshire. This stone is easily worked, but acquires hardness by exposure to the atmosphere, and consequent durability. The elevations to the Courts are of local bricks from Robinson's yard in the Park, and stone is sparingly used. The Basement story is executed in Stand Hills' daystone, which from long exposure, has acquired the hardness of granite. The late Mr. Bernard Wake made a gift of this stone to the Hospital Board, having some twelve months before his death had a sample prepared. The floors are constructed with Siemens-Martin steel girders, embedded in cement concrete, and the flat roofs are covered with mineral asphalt. The new Hospital when complete will have cost £50,000. Mr. Charles Hadfield is the architect.

THE CARDIFF DISPUTE.

MR. SEWARD AND THE ARCHITECTS' SOCIETY.

A LITTLE while ago, a most regrettable dispute arose in professional circles in Cardiff. It will be remembered that the Cardiff, South Wales and Monmouthshire Architects' Society objected to the application of Mr. Edwin Seward, F.R.I.B.A., as Architect for the proposed new Museum and Art Gallery to be built by the Corporation. The Society's point was that there ought to be a competition. Mr. Seward defended himself vigorously, and the "affair" created an unpleasant sense of friction all round. On Tuesday last, at a meeting of the Museum Building Committee, Councillor Beavan, the chairman, announced that a site for the proposed new Museum and Art Gallery had been selected, and the Committee now had to pass to a consideration of the building itself. A ground plan had been drawn up, showing the requirements in the matter of rooms for the Museum. It must be borne in mind that the Committee had only the sum of £12,000 to spend on the edifice, as, out of the £16,000 allowed for the Museum, £4,000 had already been spent in gaining possession of the site in Park Place. The meeting then discussed the question of architect for the building, but, before doing so, Mr. Edwin Seward stated that he thought it advisable, as he, as the Committee knew, was professionally interested in the matter, that he should withdraw from the meeting. The Chairman thought that it would be better if Mr. Seward would remain, at any rate while the clerk read certain correspondence on the subject. A memorial was then read from the South Wales and Monmouthshire Architects' Society asking the Committee that, unless they had pledged themselves to any architect the Committee should invite a public competition for the post of architect, which should be under the rules of the Royal Institute of British Architects. A letter was also read from Mr. David Jenkins stating that, although his name had been subscribed to the above memorial, he had never given his consent to the use of his name in the matter, and he opposed in the strongest terms the submittal of the memorial to the Committee. A letter on the subject from Mr. Seward himself was further read, in which he explained his position in the matter. He stated that he had for some time past acted as architect for the Museum, which was at the present time part of the Free Library. Acting in this capacity, he

had prepared plans for which he had received no remuneration, and he thus felt that he must claim either remuneration for his professional assistance in this respect or to be engaged as architect for the new building. Mr. Seward then retired, and the Mayor (Alderman P. W. Carey) said that, although Mr. Seward might not have a legal, he had a moral claim upon them, and moved that he be engaged as architect to the new building. The resolution was carried unanimously. It was also agreed to return an answer to the memorial of the South Wales Architects' Society saying that the Committee could not accede to the request contained therein, as it felt itself pledged to Mr. Seward. Mr. Seward was then recalled, and informed of the decision of the meeting. He, on the request of the Committee, consented to withdraw all allegations of claim for past services. It was also resolved that the architect be at once requested to take the plans prepared by Mr. Ward as a basis upon which to act, and that he set at once about the means for carrying out the plans.

SAWDUST.

THE Town Council of Leicester propose to borrow sums, amounting in all to £29,550, for public works and improvements in the Borough.

The foundation stones of a new Wesleyan Mission Hall have been laid at Greengates, Bradford. The Hall is to cost about £500.

FOR the erection of a new School at Meledor, St. Stephen's-in-Bramwell School Board, the tenders of Mr. Gilbert for masonry, and Messrs. Curra, Walters & Richards for carpentry, have been accepted.

THE biggest contract for stonework ever awarded was probably that reported to have been made for the stone for the Hudson River Bridge. The sum named is above £1,600,000.

CLEVELAND is to have the first Elevated Bridge worked by electricity and compressed air. The Bridge will be poised on huge stone piers, and give a clear channel over the river of 115 ft.

THE Keighley Town Council has declined to approve the plans of the Sanitary Committee for buildings to be erected at Low Bridge at a cost of £700. The Council, however, agreed to apply for power to borrow £6,250 for Artisans' Dwellings.

THE repairs and pointing to the Sheffield Parish Church and Spire, which has been done by Messrs. B. Powell and Son, contractors, Cavendish Street, Sheffield, are now completed. The work has been carried on under the superintendence of Messrs. Flockton and Gibbs, architects, St. James' Row, Sheffield.

THE Guardians have decided to ask Mr. Sampson Hill, their Architect, to prepare plans for the first portion of a new Infirmary to be built at the back of the Redruth Workhouse in accordance with the suggestion of the Local Government Board. The cost of the portion to be erected is estimated at £1,000.

ABOUT six miles of wire cable wound around a drum 8 ft. in diameter was carted through the streets of New York one day last week. The wire weighed 63 tons, and the truck that carried it 14 tons more. It required 42 horses to draw the load, said to be the heaviest ever carried through the City's streets.

THE Hanging Committee is busily engaged this week making the necessary arrangements for opening the Exhibition at Plas Mawr, Conway, on the 1st of June. Monday and Tuesday were the receiving days. A Gallery is to be constructed in the Courtyard of the old Mansion for the accommodation of additional pictures, and this, it is expected, will be completed by the middle of summer.

WE are informed that Mr. Arthur Baker, F.R.I.B.A., of the firm of Messrs. Baker and Turrill, of Effingham House, Arundel Street, Strand, and Mr. Richard P. Day, A.R.I.B.A., of 20, John Street, Adelphi, have been appointed surveyors of dilapidations in and for the Diocese of London in accordance with the Ecclesiastical Dilapidations Act of 1871, to fill the vacancy caused by the recent death of Mr. Gordon M. Hills, who held the appointment as sole surveyor for the Diocese since 1871.

THE "KEY METHOD" OF VENTILATING HOSPITALS.

AN INSTALLATION AT BIRMINGHAM.

THE arrangements for the ventilation of the New General Hospital, Birmingham, having been attacked, the *Lancet* has made an inspection, and the current number contains a special report upon what is known as the Key method of ventilation—the system introduced. "We cannot do better," says the *Lancet*, "than take as an example the New General Hospital, now in course of erection in Birmingham, which, by the courtesy of the architect, Mr. William Henman, we have recently had an opportunity of inspecting. Let it be understood that in doing so we are not dealing with a system that has merely been projected, but with one that has already been carried into practice in several infirmaries and other buildings, Schools, Police Courts, and the like, and which has actually been provided for in the plans of one of our great Hospitals. The building operations, indeed, at the New General Hospital, Birmingham, are so far advanced as to afford a clear idea and plan of the installation which is to effect the ventilation adopted by the Hospital." The article then briefly reviews the systems of ventilation which are available, and points out broadly the advantages of the propulsion system. The method of its application and the installation at the New General Hospital, Birmingham, are then described. The method of ventilation is primarily due to Mr. William Key, an engineer of Glasgow. "In applying the Key system to a Hospital, a selection is first made of a position, uncontaminated by surroundings (or of more than one such position if the buildings are extensive), where air can be drawn in towards an extended screen, kept moistened with water, and periodically flushed to free it from the large amount of dirt which it intercepts. The screen is formed of a series of cocoanut-fibre cords stretched vertically, and interlaced with copper wire to keep them in position. On the outer side a coil of steam or hot-water pipes is placed to prevent freezing in the winter, and on the inside are other heating coils, arranged so that by means of doors or louvres the air passing through or under them may be regulated. It is then forced onward by means of a rotary fan or air propeller, set in motion by steam, water, gas, or other power—preferably an electric motor—and finds its way to the several rooms, wards, or corridors by means of a wide and lofty horizontal duct and up flues, all calculated to the required areas, at the base of which are more heating coils, together with a simple contrivance by which both the volume and temperature of the air supply to any separate part of the buildings can be adjusted to a nicety. The air enters where required by means of trumpet-mouthed openings, at about two-thirds the height of the storey, so as to disperse evenly throughout the apartment; and at the same time it expels an equal amount of air, principally through openings provided on the same side of the room as the inlets, up flues of the proper sectional area, into ducts in the roof, and thence to the open, through valved and louvred turrets or flaps, four-sided, so that outer movement of the atmosphere shall exert no adverse influence upon the outflow. These outlet air-valves are so constructed as to place the air within the building under a slight pressure of about four ounces per square foot in excess of the outside atmospheric pressure at the time. In the new General Hospital at Birmingham an installation has been provided for heating and ventilating the buildings, the cubical capacity of which equals about two million feet; so that, as the air may be changed ten times per hour without opening any windows, twenty million feet of air every hour has to be propelled, cleansed, and warmed; for which purpose there will be eight 'fans,' from six to eight feet diameter, to be turned by electric motors, 2,000 superficial feet of cleansing screen, and about 35,000 feet of steam tubing. The results may be summed up as follows:—

- (1) Micro-organisms are entrapped by passing air through moistened screens.
- (2) The apparatus employed in the experiments in which dust loaded with organisms was forced through an experimental screen into a wooden

chamber, from which samples of the air were taken from time to time for bacteriological analysis, gave in all probability less perfect results than would occur in practice, because in these experiments the air, highly charged with micro-organisms, was both forced directly through the screens and also by force drawn through them, whereas in buildings the air would be propelled gently through the screens simply by the slight pressure of the incoming air, no suctional force whatever being employed.

- (3) The very marked diminution in the number of micro-organisms which passed through the screens when supported by means of perforated zinc, and the smaller number still which pass through a thin layer of cotton-wool, indicate varying powers of filtration, and point to the possibility of devising a screen which will practically free the air from germs and yet not unduly retard the expulsion of the air from the building.
- (4) In proportion to the closeness of texture of the screen material, the size of the screens must be increased so that the air may pass through them with the least possible force being required to expel it.
- (5) The moistened screens are all that is required to arrest the germs, but carbolic acid should be added for destroying them.
- (6) Disease germs or fungi likely to be conveyed by the atmosphere are usually found attached to comparatively large floating particles, as the scales of the epidermis, or fluffy shreds of material which would be entrapped by the screens in greater proportion than the germs experimented with."

TWENTY MILLIONS FOR AN AQUEDUCT.

WE shall certainly have to imitate the Corporations of Glasgow, Birmingham, Liverpool and Manchester, in finding a catchment area and in constructing an aqueduct, says the *Daily Chronicle*, speaking for London. Neither would have presented any difficulty had there been a proper municipal spirit and organisation in the Metropolis when Mr. Bateman proposed his great scheme of bringing water from Wales in 1865. But we have wasted a generation, and our present sources of supply are going from bad to worse. A catchment basin will now cost at least double what it would have cost thirty years ago. We must assume from the fact that Manchester and Birmingham have gone so far afield that the fine water of the Peak district is not available, and practically we seem to be limited to that part of South Wales which lies about Fforest Mawr, or the Black Mountains, where we might poach a little on both the Usk and the Wye. But at any rate, London cannot put up much longer with its "filtered filth," the abandonment of which would greatly improve the navigation of the Lower Thames and purify its waters. Perhaps a supplementary supply might be got from the Surrey, Kent and Sussex border, but it could never be the main dependence of London. We must face the fact that an aqueduct of adequate dimensions, with the catchment area and necessary reservoirs on the Chiltern Hills, would cost £20,000,000, but that sum could now be raised at an annual charge of three per cent., or with a half per cent. sinking fund, at a yearly cost of £700,000. Even if it cost much more we cannot afford to go on as we are. It might, perhaps, be possible to economise by having two supplies, and using Welsh water for potable purposes and Thames or Lea water for flushing and manufacturing. But no paltering with the subject will serve our purpose. The evil is great and the need for a change is urgent. The health and the welfare of our great community require it, and that should be enough both for Londoners and for the Legislature which is so thoroughly identified with London.

THE Exhibition of Watches and Clocks, which opened at the Royal Aquarium on Wednesday, has an artistic as well as horological interest. Among the specimens included are those which belonged to Charles I., Cromwell, James I., Queen Elizabeth, Lady Jane Grey, and others. Most of the best watches and clocks are distinctly indicative of the state of Decorative Design and Art Craftsmanship of their period.

A NEW SCOTCH ASYLUM.

THE new Hartwood Asylum, which has been constructed for the accommodation of lunatics in the Lanark district, was opened last week by Sir Windham Carmichael-Anstruther, convener of the county. The buildings, which occupy an area of about 10 acres, are plainly and substantially built in the old Scottish style, Architectural decoration having been made subsidiary to the grouping of the erections for efficiency and convenience of administration. The Asylum may be generally described as consisting of a number of distinct blocks, each connected with the other merely by an 8-ft. Corridor. This arrangement, while, as already indicated, forbidding structural beauty, practically isolates each block, and thus minimises the risk of an extensive fire, and also secures better lighting of the various departments. The Central Block consists of the Administrative Department. On the ground floor are the Dining Hall, which will accommodate 600 patients besides attendants, and the Kitchen, measuring 60 feet by 40 feet, with Sculleries, &c.; while immediately to the rear is the General Store, into which the railway trucks can be shunted on a siding from Hartwood Station—a few hundred yards off. Above the Dining Hall is the Recreation Room, capable of seating 1,200 persons. To the east and west of the Main Block are respectively the male and female sections of the institution. Each department is subdivided into distinct blocks for the treatment of chronic, acute, and senile patients. Some distance to the east of the Asylum is the Superintendent's House, and to the south of the Edinburgh and Glasgow Railway, which skirts the grounds, are several blocks of Attendants' Cottages. The building material, which had to be conveyed by rail, amounted to about 75,000 tons; and the laying-out of the grounds, including the construction of two Reservoirs of a storage capacity of 8,280,000 gallons for water supply, involved the removal of about 290,000 cubic yards of earth. The buildings are heated throughout by hot water, the pipes for which measure nearly 9½ miles. Electric light is employed for illumination, the lamps numbering 1,260, and having a combined power of 21,984 candles. In drainage and ventilation the most recent and approved ideas have been utilised, and the interior finishings, many of them specially designed, have been selected with a view to comfort and safety. For the protection of the patients, the railway line along the front of the Asylum, and up the western boundary to the lower Reservoir, and round both Reservoirs, has been fenced by a 7 feet high unclimbable iron fence, and besides this there has been erected about 9,000 yards of galvanised iron and wire fencing. Two points which have been kept steadily in view are the avoidance of anything which would suggest to the patients the idea of imprisonment, and the provision of every means of comfort and enjoyment practicable under the circumstances. When patients are admitted they will be introduced gradually to the Asylum life so as to avoid the shock which is so detrimental, and which, it is said, often lingers painfully in the patient's mind long after all the other associations are forgotten.

THE new Telegraph Offices and Porter's Room at the old Hove Station—shortly to be known as Holland Road Station—are now almost complete, and the Telegraph Office will be opened as soon as the wires are connected, which will be in the course of a few days.

THE Hove Urban District Council is desirous of receiving tenders for works of street masonry and jobbing work, and for the supply of ironmongery, gas and water pipes and fittings, etc., for a period of three years. Communications should be addressed to the Town Clerk by June 5th.

ST. GEORGE'S CHURCH, Maryhill, Glasgow, was consecrated on Wednesday last. The Church, which was designed by Mr. Petrie, Glasgow, is Early English in style, and occupies a commanding site on the Garscube estate. It is seated at present for 280. Seven of the windows are filled with stained glass by Kempe, of London, and the fittings are all extremely handsome.

ARCHITECTURAL IRONWORK.

CONCLUDING CHAPTER.—ROOFS ENTIRELY OF IRON.

ROOFS constructed solely of iron combine lightness, strength, durability, and economy. They are framed in a very great variety of forms, the choice of which is dependent partly on the width of the space to be spanned, partly on the fancy of the construction, and partly upon other considerations only to be comprehended by experience and practice. Amongst the roofs which do for principals, **I** beams make very good rafters, and in light trusses **T** bars, with or without a plate, rivetted to the upper flange, answer every purpose. Struts may be made of **T** bars or angle iron, as these forms afford great facilities for attachment to the rafters. Ties may be of flat or round bars, attached by eyes and pins or screw ends. Care should be especially taken to properly proportion the dimensions of eyes and pins to the strains upon them. A very good and safe rule in practice is to make the diameter of the pin from $\frac{3}{16}$ ths to $\frac{1}{4}$ ths of the width of the bar in flat, and $\frac{1}{4}$ times the diameter of the bar in round, giving the eye a sectional area of fifty per cent. in excess of that of the bar. The thickness of flat bars should be at least one-fourth that of the width, in order to secure good bearing surface, and the metal at the eyes should be as thick as the bars on which they are upset. The details of roof trusses vary to suit the character of the work, and the sections of iron employed. The heel or butt of the rafter usually rests on the wall in a cast iron skewback fitted to the beam and sloping to the angle required by the pitch of the roof. The struts are attached to the rafters by cast caps or wrought iron strap plates, and the joints at their feet made either for pin or screw connections. The peak is joined by wrought iron bolts and plates, the beams or rafters having been cut to the required angle. In roofs of wide span, provision for the expansion of the iron, due to changes of temperature, must be made, by resting the skewback of one end of the truss on a cast wall plate, with rollers interposed to permit of the sliding of the heel without straining the wall, but this precaution is not necessary in roofs of 60 feet span or less. Careful experiments have proved that an iron rod 100 feet in length will vary about one-tenth of a foot for a change of temperature of 150 degrees Fahrenheit, and as this is the greatest range to which iron beams and rods in a building would be probably subjected to in this climate, compensation to that amount would be sufficient for all purposes. For a 60 feet span the variation of each wall would then be only $\frac{1}{1000}$ of a foot either way from the perpendicular, a variation so small and so gradually attained that there is no danger in imposing it upon the side walls by firmly fastening to them each heel of the rafters. Expansion is also provided against by fastening down one heel with wall bolts, and allowing the other to slide to and fro on the wall plates, without rollers.

Coming now to the strains, in estimating these in iron roofs the weight of the structure itself, as well as the loads to be supported, must be taken into account. Tredgold's assumption of the total maximum vertical load of 40 lbs. per square foot of horizontal surface is usually considered sufficiently high; but if a floor or ceiling be suspended from the tie beam, or should the under side of the rafters be banded or lathed and plastered, it is evident that these additional weights require more strength in the roof for their support.

For ordinary roofs of short span, 30 lbs. per square foot is quite enough, however, and for long spans of 60 feet and over, 35 lbs. will be sufficient to provide for, with the factors of safety in the material that are usually adopted. The stress upon each member of the truss having been found by any of the methods of calculation preferred, the sectional areas may be found by taking the tensile strength of good wrought-iron at 10,000 lbs. per square inch, and the compressive resistance of beams or shaped iron at from 6,000 lbs. to 8,000 lbs. for the same unit of section. The smaller, or counter-balance rods, ought to be made strong enough to resist strains induced by wind pressure on one side of the roof only—the

other half being unloaded. Lateral braces should be provided in each end panel of straight roofs, as well to secure the roof during erection as to provide an abutment that will uphold the whole in case of fire or accident. From the panels so braced, the rods run to each of the other rafters, and, with the purlins, unite the roof into a firm and compact whole. The gable walls are sometimes employed to anchor the tie rods into, but this plan should be avoided.

Main rafters may be spaced at from four feet to twenty feet apart, the spacing being partially regulated by the size of the purlin, and this again by the material used for covering. For slate on iron purlins a convenient spacing is about eight feet between centres of rafters, the angle iron purlins being put in at from seven inches to 14 inches apart, according to the size of the slate employed, and notched at the ends into the flanges of the rafters. They are held in place by the rods that extend from rafter to rafter the entire length of the building, three or four rows of these rods being placed between the peak or ridge of the roof and the heel of the rafter, at intervals of from six feet to eight feet. On these iron purlins the slates may be laid directly and held down by copper or lead nails, clinched around the angle bar. When greater intervals are adopted in spacing rafters, the purlins may be light beams, fastened on top or against the sides of the principals with brackets—allowance, of course, always being made for longitudinal expansion of the iron from changes of temperature. On these purlins may be fastened wooden jack rafters, carrying the sheathing bonds or laths on which the metallic or slate covering is laid in the usual manner, or sheets of galvanised corrugated iron may be fastened from purlin to purlin, and thus the whole roof be entirely composed of metal. When wooden purlins are employed, they may be put between the rafters, and held in place by tie rods, or on top, and fastened to the rafter by brackets.

With this my remarks on Architectural Ironwork may terminate, as I do not think that the construction of sheet iron buildings, which are usually only of a temporary character, or the employment of the many sanitary and decorative details, which would extend in this last case from a railing at the basement to a finial at the summit of a tower weathervane, come within the scope of these articles.

DOORWAYS OF ANCIENT IRISH CHURCHES.

THE most usual form of doorway, and, as it would appear, the most ancient, is the quadrangular one as found in the stone roofed Oratories in Kerry, built without cement, and of which the doorway of the Oratory of Gallerus affords the finest example. This form was perpetuated in the Churches said to have been founded by St. Patrick and his immediate successors. In this class of doorway no ornament whatever is used, and this was the usual mode of construction in the sixth and seventh centuries, and perhaps even later; but the doorways were not always plain in those ages, for in many instances they present a flat projecting architrave, as in the doorways of the oldest Greek and Etruscan buildings, as well as in those earliest Roman Churches. The doorway of the Church at Glendalough, popularly called Our Lady's Church, is, however, carved with a double moulding in the architrave, and it is also ornamented with a cross cut saltierwise. This Church, according to the tradition of the place, was the first Church erected in the lower part of the valley by St. Kevin, and is that in which he was afterwards interred, so that its erection may be fairly referred to the middle of the sixth century. Though the quadrangular form is that most characteristic of the doorways of the primitive Irish Churches, there are examples of doorways which would seem to be of the contemporaneous age, constructed in what may be called the Roman manner—namely, with a semi-circular arch springing from square impost, and exactly resembling the ancient Saxon doorways, excepting that the sides are usually more or less inclined. There is another form of doorway found in the earliest of our Churches, also of quadrangular form, but in which the

weight of the lintel is taken off by a semi-circular arch placed immediately above it, and having the place within the curve filled up with masonry. A doorway of this description is found in the Cathedral Church of Glendalough, and also in the same curious structure, in the same interesting locality, called St. Kevin's House. It is also found as a side entrance in the beautiful Abbey Church of Innishmaan, in Lough Mask, County of Mayo, originally built in the fifth century by St. Cormac, and remodelled and enlarged in the twelfth. The finest specimen, however, of this class of doorway is probably that of the ancient Parish Church of Britway, in the barony of Barrymore, County of Cork, one of the most interesting remains in the County.

SANITARY PROPORTIONS OF ROOMS.

FOR purposes of ventilation the height must bear some relation to the size. Adequate movements in the currents of air cannot be secured in a room unless the height be proportioned to the width and length. The minimum height must be fixed with reference to that which will allow the currents of air to circulate without being inconvenient to the occupants. Therefore, in proportion as the width and length of a room are increased so must the height be increased. On this account it is not advisable to make rooms much less than 10 feet high. With large rooms, as the height should be increased in proportion to the size, if the cubic space be the measure of the number of occupants, the area or floor space per occupant would diminish with the size of the room. As, therefore, the height of rooms is necessarily variable, it follows that it is rather the floor space which must be considered in allotting accommodation to the occupants of a room than the cubic space. In Barracks a floor space of some 50 to 60, and occasionally 80 square feet is allowed per occupant. These are for rooms occupied by day as well as for sleeping rooms. In Workhouses for dormitories a minimum floor space of 25 square feet has been admitted, provided the ventilation was carefully attended to. In Nurseries and Servants' Rooms from 50 to 60 square feet is desirable per occupant—that is to say, a room 10 feet square, or 10 feet by 12 feet in area, should not contain more than two persons. In Schoolrooms which are only occupied during parts of the day, and where the air can be changed between the periods of occupation, a less amount would suffice, and from 15 to 20 square feet is sufficient.

SAWDUST.

THE well-known handsome drinking fountain standing in Adelaide Place, close to London Bridge, which cost over £1,500, has been given by the Metropolitan Drinking Fountain and Cattle Trough Association to the St. Olave's Board of Works, and will probably be placed on or near the Tower Bridge Approach. The cost of removal will be about £250.

THE Bolton builders have advanced their employes wages from 8½d. to 9d. per hour, and reduced the working hours from 52 per week to 49½ in winter, and 47 in summer.

THE Amsterdam Exhibition was opened on Saturday, May 11th, the buildings and grounds covering over 160,000 square metres. It comprises exhibits connected with the building and furnishing of hotels and cafés, the construction and equipment of railways and ships, the latest electric inventions, and general industries. One of the features is an Electric Restaurant, where the services of waiters are dispensed with, and the guests are served by electric contrivances, while another attraction is a reproduction of Old Holland.

It is proposed to rebuild the dangerous portion of the Spire of St. Mary's Church, Devonport.

MRS. WELLER POLEY, of West Broyle House, has signified her intention of presenting a magnificent organ to East Lavant Church; and an Organ Chamber in keeping with the Architecture of the sacred building is to be constructed on the north side of the Chancel. The Organ will be built under the supervision of Mr. F. J. Read, Mus.Doc., organist of Chichester Cathedral.

Trade and Commerce.

An Important Decision under the London Building Act.—An important decision was given by Mr. Horace Smith, at the Clerkenwell Police Court, with especial reference to Sec. 212 of the new London Building Act, in the case of *Matthews v. Salt*. The defendant, a builder, who was erecting a beerhouse in Collier Street, Pentonville (for Messrs. Whitbread, the brewers), was summoned by the Complainant, the Acting District Surveyor of Clerkenwell (during Mr. Carritt's absence from ill health), for not separating by a fire-resisting floor the part of the premises used for trade from the part used as a dwelling-house, the total area of the building exceeding ten squares. The builder's notice was dated the 23rd January, 1895, and the buildings were commenced about the end of February. It appeared that some letters passed between the freeholder's Agent and Messrs. Whitbread in April and May, 1894, by which the latter agreed to take the premises from the freeholder and to build a new house thereon, and that the terms of these letters were embodied in a more ample, formal contract of the 10th September, 1894. The drawings for the new house were as required by Clause 4 of the formal contract, approved by the freeholder's surveyor about the end of October, and the formal consent given to them on the 1st November, 1894. When the drawings were submitted to the District Surveyor, he called the attention of Messrs. Whitbread's architect to the requirements of Section 74 of the Act as to the construction of the building in certain particulars of fire-resisting materials, and served the builder with notice of objection under Sec. 150, on which the builder took no steps, as he contended that the contract for this building was entered into before the passing of this Act, and that, therefore, he came within Sec. 212, and the new building would be erected in compliance with the old law. The builder having proceeded to erect his building and having laid fir joists for the floor, forming the separation of the first storey (which consisted of the living and sleeping rooms for the occupier) from the ground floor, notice of irregularity was on the 4th April served on him by the District Surveyor under Sec. 151, and a summons issued on the notice not being complied with. On behalf of the builder it was argued by Mr. J. P. Grain, who appeared with Mr. Sydney Knox for the Defendant, that the contract under which the house was being built dated from the 16th April last year, when Messrs. Whitbread purchased the lease from the tenant of the premises. He said they then applied to the surveyor to the freeholder for a building lease, and on the 31st May they received a letter containing the terms on which a new lease would be granted. These were accepted by them except as to the amount to be expended in re-building which was afterwards agreed. The formal contract was signed on the 10th September, 1894, and the drawings were submitted on the 5th October to the freeholder, and afterwards signed. Mr. Grain contended that the letters between the parties dated 31st May and 5th June, constituted a good contract, and could have been legally enforced. He also argued that if the Magistrate was against him on this point that he submitted that a public-house did not come under Sec. 74, and that to build a wall around the bar-parlour, which was part of the domestic building and shut it off from the bar, would make it absolutely useless, and further, that notwithstanding the Defendant had not appealed to the Magistrate under Sec. 150 to set aside the requirements of the District Surveyor, that it was still open to the Magistrate to decide what should be done. Mr. T. Seager Berry, from the office of the Solicitor to the London County Council, pointed out that as the passages and staircase had not yet been constructed, and that consequently no irregularity had been committed, the summons was simply for making the floor fire-resisting. The Magistrate, without calling on Mr. Berry, stated that although he agreed that the arrangement came to in the letters of the 31st May and 5th June, was a binding contract between the owner and tenant, he did not consider such a contract was a contract as meant by Sec. 212. Contract in that section in his view meant a contract to make a particular building, and not a contract to purchase or take land on which a building is to be erected. He did not think that in this case a proper contract to satisfy that section had been made till the document of the 10th September, 1894, was signed, and the plans mentioned therein drawn. He was against Mr. Grain on Sec. 74; he thought the Section applied to a public-house which did not come within the Section referring to hotels and public buildings, and it seemed to him that a public-house must be held to be a building used in part for the purposes of trade. He, therefore, ordered that the whole of the floor under the dwelling rooms should be made of fire-resisting materials.

Robert Adams' Manufactures.—At a recent visit we paid to Mr. Robert Adams' works, 67, Newington Causeway, our representative was much interested in the new Impervious Casements and Frames, the invention of Mr. Arthur W. Adams. The casement is made with four contact or weather stopping surfaces, which are perfectly true to the frame, making it, as it is termed, impervious to the weather and perfectly rigid. There is also a condensation channel which effectually drains off any water that may accumulate. The casements are made single or double, and in all shapes, to suit the requirements of customers. Amongst the many specialities introduced by Mr. Adams, that for opening fanlights, the "Falling Link Adjuster," which consists of a rack chain working on a wheel with an endless cord, is worthy of the attention of architects. This adjustment is worked by pulling a cord which causes the wheel to revolve and traverse the rack. The same principle is also adopted in a circular fanlight, called the "Glade," which is very neat and effective. Mr. Adams is Sole Agent in the United Kingdom for the "Pullman" Steel Frame Sash Balance, which does away with cords and weights, and can be used where there is not room for the ordinary weights. These are guaranteed to last fifteen years. Another speciality is the X. I.T. and Exodux Panic Preventing Bolt for Theatres, &c. The doors are automatically bolted by closing, and can only be opened from the outside by a key, but are immediately opened from the inside by pushing against the rod. At some future occasion we hope to have the space and opportunity of describing some of Mr. Adams' other excellent patents.

Mr. Thomas Elsley, of Great Portland Street, London, W., is issuing a series of Photographs of his Mantelpieces, of which we shall give an illustration shortly. In execution and design these Mantelpieces are as good as anything we have seen.

The Patent "Push and Pull" Locks, manufactured by Messrs. Joseph Kaye & Sons, of 93, High Holborn, London, W.C., must, by this time, be well known to every architect, but they are so continually improving them, and adapting them for fresh uses, that we give a brief description of the advantages they offer. The name describes their action. The door is opened from the inside or outside by pushing or pulling the handle. It immediately releases the bolt and the door opens or shuts. Although the action is so simple, it is perfectly fast when closed. The locks are suitable for every case in which the ordinary lock is used. In connection with their new Patent Lever Lock, they have introduced a great improvement in the striking plate, which compensates for all shrinkage of doors with only $\frac{1}{4}$ -in. projection of latch. This is effected by an adjustable roller, which can be projected to the desired extent by turning a screw. The firm's Patent Automatic Door Porters are for holding doors in the open position when desired. In the old door catch, it was necessary to press it down with the foot before the door could be released, causing the door, through kicking against it, to be spoilt, at any rate as regards its appearance. Messrs. Kaye's Patent obviates this, as the door is fastened back or released by the action of opening and gently pulling it for closing. We have not space this week to describe their Panic Door Bolts, or Stable Door Locks, and Carriage Handles, and several other of this Firm's specialities, but may do so on a future occasion.

Messrs. Doulton & Co.—Catalogue of Sanitary Appliances.—Messrs. Doulton send us the 1895 Edition of this the 38th Section of their Catalogue, and in it we gather that they have erected additional Works and Foundries at Paisley, so that in conjunction with their various Potteries and Art Studios, in Lambeth and Staffordshire, they have under their own control the whole of the manufacture and finish of the different fittings connected with every Sanitary Appliance turned out by the firm. Since the issue of the 1890 Catalogue, many important additions have been made, the most important of which, perhaps, is the "Simplicitas" Closet, and the METALLO-KERAMIC joint which solves, so Messrs. Doulton inform us, the hitherto insurmountable difficulty of ensuring a perfect junction between the pottery trap of closet and the lead soil pipe. By a patented process—which, from the neat little model sent to us, we are unable at present to solve—there is a thorough incorporation of the two materials, rendering ingress of sewer-gas to the house quite impossible. This joint, which is quite startling in its effectiveness, puzzles us at the moment, but perhaps Messrs. Doulton will think fit to let us into the secret. The Catalogue itself consists of 300 pages illustrative of all the Sanitary Appliances manufactured by this notorious firm, and as every item is priced in "plain figures," the volume forms an indispensable reference in every Architect's office. Several of the pages devoted to Glazed and Enamelled Tiles for Wall Linings, are quite wonderful specimens of colour printing.

"Quantities," by Banister Fletcher.—The most perfect work on the ethics of Quantity Surveying, if so dry but so useful a science has any ethics, is assuredly the 1895 Edition of Professor Banister Fletcher's work, a copy of which is forwarded to us by Mr. Batsford, the publisher. The book now runs to 430 pages, is profusely illustrated in all the trades and contains a complete set of drawings of an Entrance Lodge to illustrate (a) the complete taking off in all trades; (b) the abstracting of the various items in the various trades; and (c) the complete bill. A most complete Index and Table of Contents is included in the volume, which should be found on the bookshelves of every Architect and Surveyor in the Kingdom.

THE re-opening of the Chapter House of Durham Cathedral (Bishop Lightfoot Memorial) has been postponed for twelvemonths.

OUT of seventeen designs submitted for the erection of a new Church in Cambridge Road, Southport, those of Messrs. Preston and Vaughan, of Manchester, have been selected.

A HANDSOME Hall and Institute, costing £16,000, for mission and social work, at East Greenwich, have been built and presented by Mr. Josiah Vavasour, of Blackheath, to the Blackheath Congregational Church.

NEW buildings are about to be erected in Upper Bangor, in connection with the Bangor County School for Girls. The buildings, which are to cost about £2,000, will include a Gymnasium and facilities for technical instruction.

THE Bacup Town Council has decided to accept the plans and tenders of proposed new Municipal Buildings at Hempsteads, to cost £13,241, and that application be made to the Local Government Board for sanction to borrow £14,000 for such purpose. Mr. Beaumont, of Manchester, is the architect.

ST. PAUL'S CHURCH, Widnes, near Warrington, is about to undergo several important alterations and improvements, amongst which will be the provision of a new organ. To provide a chamber for the instrument it is probable that the lower portion of a new Tower, which has been in contemplation, will have to be built. The cost of the work will be about £700.

OF the competitive designs received for the proposed new County buildings, Durham, the first premium of £200 has been awarded to "Onward," and the second, £100, to "Demos." The successful competitors were Messrs. Cooksey and Cox, Craven Street, Charing Cross, London, first; and Messrs. Vaughan and Coates, Sunderland, second.

Awards in our Second Competition.

"A VILLAGE CLUB HOUSE."

- No. 1.—"Rough Cast." T. TYRWHITT,
33, Vincent Square, Westminster
No. 2.—"Demos." C. WONTNER SMITH,
34, Woodberry Grove, Finsbury Park, N.
No. 3.—"Robin Hood." J. R. IRESON,
63, Alexandra Road, Addiscombe, Surrey.

I HAVE looked carefully through the various sets of drawings sent in, says Mr. Leonard Stokes, F.R.I.B.A., and, after considerable deliberation have reduced the number to three, all of which have distinctive merits. The final selection of merit I, however, found very difficult, as I think the conditions are a little too elastic, and I found myself in effect choosing between the respective "points" of an elephant and a doormouse.

The three designs which I selected as the best are "Rough Cast," "Merlin" and "Demos," and applying the rules as to cost to them, I found that "Merlin" has distinctly broken the limit, as his design would cost very nearly double the stipulated sum (£2,000). I therefore regret that I am obliged to report against this design, although it is in other respects, perhaps, the best; and apart from one or two obvious little defects in plan, would make an excellent Club, and I hope that you may see your way to give some sort of prize to the author of this design, and make it clearer in future that the cost limit is to be more strictly adhered to.

Of the remaining two, "Rough Cast" is undoubtedly the best, and should receive the First Prize, although before the design could be carried out, the Kitchen and Offices would require extending, as they are much too cramped; the Committee Room is also too small, and some sort of Retiring Room from the Dais or General Room, should be provided, and as "Rough Cast" has kept well within the limit of cost, these matters could all be attended to without infringing that rule. Apart from the defects I have mentioned, the design, as a whole, is an admirable one, and would be a credit to any Village, and also to its architect.

"Demos" should take second place, and his plan has many good points about it, although I do not quite like the General Meeting Room being on the first floor, and the rather cramped planning of the Offices; otherwise the arrangements are all good. As a whole, however, the design is not quite so suitable and appropriate as "Rough Cast," and suggests Town rather than Village Architecture. This remark applies also to "Merlin," whose design would certainly look well as a building, but I think it would probably look rather out of place in a Village, at any rate, in the kind of Village I have in my mind, but here again I suggest that the instructions and conditions should be more clear and emphatic, as, in order to compare designs with any degree of fairness, it is necessary that the competitors should all start even.

Of the remaining designs "Robin Hood" (who has certainly grasped the Village idea), "Crypto" and "Horseforde," all exhibit considerable skill and ability, but the general standard is not quite up to those I have already mentioned.

LEONARD STOKES.

A NEW Church, to be called St. Margaret's, is about to be built in Abel Street, Burnley. The estimated cost is £5,000.

A NEW School is to be built at Heywood Street, Liverpool, application having been made to the Educational Department for sanction to borrow £15,903 6s. for that purpose.

THE designs submitted by Mr. George Baines F.R.I.B.A., 4, Great Winchester Street, London, E.C., in the open competition for a ladies' College at High Barnet, have been selected, and he has been instructed to obtain tenders forthwith.

THE authorities of the Midland Railway have been forced to abandon the electric lighting system, with which several of its trains have been equipped, on account of its unreliability and expensiveness. The trains will hereafter be illuminated by Pintsch gas.

The Builders' Journal COMPETITIONS.

No. 3.—Swimming Baths.

Designs for Swimming Baths in a country town of 5,000 inhabitants. To contain cold water bath fifty feet long, three feet to six feet deep, with necessary dressing boxes; six private washing baths for gentlemen and three for ladies; necessary heating and ventilating appliances to be provided, together with waiting and caretaker's rooms, the entire cost not to exceed £3,000. The site is 100 feet deep and of any necessary frontage, but entrance can only be obtained from the front. All designs to be delivered on or before Monday, the 10th day of June.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—**A Gold Medal and a Cheque for £10 10s.**, to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—**A Silver Medal and a Cheque for £3 3s.**, to the competitor who submits the best single set of drawings during the session.
- 3.—**Certificates** signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

THE subscriptions to the Tennyson Beacon in the Isle of Wight are coming in so slowly that the modest sum required is still not nearly reached. The Beacon is to be a Monolith in the form of an Iona Cross, and is to take the place of the present pile of tarred wood known as the Nodes Beacon, the authorities of Trinity House having consented to the change. Twelve hundred pounds is the sum needed, and of this £800 has been subscribed in England. The American appeal, however, based not alone upon American regard for Tennyson, but also upon the fact that Englishmen have placed in Westminster Abbey memorials to Longfellow and Lowell, and in St. Margaret's one to Phillips Brooks, has only produced £144.

SOCIETY MEETINGS.

Edinburgh Architectural Association.

—The members of this Association made a visit to Paisley on Saturday the 11th instant, the attractions being the ancient Abbey, allowed to be the best preserved example of pre-Reformation Ecclesiastical Architecture, and the modern and costly Coats Memorial Church, of which Mr. Hippolyte J. Blanc, A.R.S.A., of Edinburgh, was the Architect. At Paisley Abbey Mr. Blanc read a paper, in which he described the foundation of the original establishment, its development till it became one of the richest in Scotland, having derived revenues from 28 Churches; and the various historical associations in which royal personages figured. It was largely destroyed by fire in 1307, and the existing remains were chiefly of the 14th and 15th centuries. Mr. Blanc pointed to its Architectural features, and indicated the character of the complete building before the Choir and Transepts came to ruin. The party afterwards proceeded to the Thomas Coats Memorial Church, where Mr. Blanc explained the Architectural features of the structure, directed attention to the problems which he set himself to solve in designing the Church, and showed how he had overcome the difficulties which he encountered.

Dundee Institute of Architecture, Science and Art.

—A meeting of this Society was held at the Albert Institute on Monday night. Ex-Bailie Keith, the President, occupied the chair. The result of the Drawing Competitions of the Institute were announced, as follows: For perspective sketch of an Architectural subject Mr. James Williamson, County Buildings, Cupar Fife, who showed a fairly good drawing of a Gate Lodge. For measured drawings Mr. Charles Soutar, 104, Commercial Street, was first with a firmly set and carefully manipulated drawing of Dairsie Church; Mr. Andrew Hutton, 16, Annfield Street, being second. Mr. Hutton did not show the same firmness in his work as Mr. Soutar, but he exhibited a considerable amount of refinement in details. For perspective sketch in pencil of a Memorial Tomb in a Church the prize was awarded to Mr. W. B. Black, 12, Hawkhill, for a capital piece of work. Mr. D. P. Grubb, 5, Osborne Place, was easily first in the Water-Colour Sketch Class with a painting of Leuchars Church. The picture shows much artistic merit and considerable latent power, its only weakness, perhaps, being that it was rather delicate in colouring. Honorariums were awarded to Mr. John Gray, 4, Baxter Park Terrace, for his Landscape, and to Mr. Alexander Malcolm, 6, Forfar Road, for "On the Eden," both meritorious pictures. There were two competitors for the best sketch from an antique subject in the Dundee Art Museum of Casts. The prize was awarded to Miss Bella Fraser, 9, Ward Road, her subject being "The Slave." The other competitor, Mr. Allan Inglis, 26, Isles's Lane, exhibited a drawing of the figure of Bacchante, which, though more firmly drawn than "The Slave," lacked the winning picture's softness and roundness. The judges of the Competition were Provost Orchar, Broughty Ferry, Mr. A. C. Lamb and Mr. T. S. Robertson. The Institute afterwards nominated the Council for the ensuing session as follows: President, Ex-Bailie Keith; Vice-President, Mr. Leslie Ower; Members of Council, Messrs. James Foggie, T. M. Cappon, W. Nixon, John Macfarlane; Hon. Secretary and Treasurer and Librarian, Mr. J. J. Henderson; Auditors, Messrs. James Hutton and Frank Salmond. Mr. Robert Little, architect, Kirkcaldy, was elected a member of the Institute.

At a special meeting of the Durham City Council, the scheme submitted by Messrs. Lomax and Lomax, of Manchester, for sewerage Purification Outfall Work, was awarded the first premium; the second being awarded to Mr. D. Balfour. The scheme submitted by Messrs. Lomax and Lomax embodies all the modern improvements in sewage treatment. The process adopted was that known as "The International," being the chemical precipitation in tanks and filtration through polarite beds.

SAWDUST.

At Chesham, Bury, new Schools, which are to be known as "The Harvey Memorial Schools," are being erected to perpetuate the name of the late Rev. Joseph Harvey. The scheme includes also the erection of a new Chapel.

THE Shropshire County Council has decided to provide a new site for a Police Station in Church Street, Shrewsbury, at a cost of £900, and plans have been prepared for the new buildings, which are estimated to cost £2,000.

An appeal is to be issued on behalf of the movement which is on foot to erect a Memorial to Prince Llewelyn, the last Welsh Prince. The appeal is addressed to Welshmen throughout the World, and those who respond to it will decide what form the Memorial ought to take.

In connection with the Brontë Society—which was formed a few months ago, a Brontë Museum has been formed, and was formally opened on Saturday last at Haworth, the Yorkshire village which gave the Sisters Brontë to the World.

At a meeting of the Lancaster Board of Guardians, on Saturday, tenders were accepted for the erection of a new Workhouse Hospital, estimated to cost about £4,596. The plans have been prepared by Mr. J. Parkinson, Architect, of Lancaster.

THE newly erected Smithfield at Denbigh, was formally opened on Tuesday. It has been erected at a cost of £5,000, out of the rates, from designs by the Borough Surveyor, Mr. J. Davies, J.P. It occupies about 14 acres, and is one of the most commodious and replete Cattle Sale Markets in North Wales.

For the erection of a new Church School at Halebank, the tender of Messrs. Holmes & Son, Liverpool, which was the lowest sent in, has been accepted. The building will cost about £2,000, and it is to be completed by October next. Accommodation will be provided for 342 scholars.

THE Croydon County Council is about to apply to the Local Government Board for permission to borrow the sum of £74,000 for the purchase of land and the erection and equipment of a new Lunatic Asylum for the Borough. The site chosen by the Lunacy Visitors is Kennel Farm, Warlingham, which is six and a quarter miles south of Croydon.

ON Wednesday afternoon the ceremony of laying the foundation stone of extensions to Didsbury Parish Church was performed by Sir Oswald Mosley, of Rolleston Hall, Burton-on-Trent. The extensions, which are from plans prepared by Messrs. Preston and Vaughan, of this city, include the erection of clergy and choir Vestries, the building of an Organ Chamber, and the addition of about 40 seats. The estimated cost is about £2,000.

THE House in which Canrobert was born, in the town of Saint Cere, in the Lot, is to be bought by the Town Council and turned into a Museum. It was built 130 years ago, and takes the form of three sides of a long square, is in thorough repair, and stands in a large garden. St. Cere is a beautiful antique town in one of the most picturesque valleys of the Lot. General Fredericks is to be President of the Committee for the creation of the Canrobert Museum. The General served as a lieutenant in the Crimea, where Canrobert won his Marshal's baton.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BRIDLINGTON (Yorks).—For the erection of corn-mill for Mr. W. T. Lowson. Mr. J. Earnshaw, architect, Bridlington Quay:—

Postill and Musk	...	...	£559 0 0
Rennard, J.	...	...	499 0 0
Sawdon, J.	...	...	490 0 0
Gray, T. (accepted)	...	...	457 16 0

[All of Bridlington Quay.]

BRIDLINGTON (Yorks).—For the erection of dwelling-house and premises, St. John's-walk, for Mr. J. Siddall, Mr. J. Earnshaw, architect, Carlton House, Bridlington Quay:—

Hudson, J. H.	...	...	£379 0 0
Rennard, J.	...	...	345 0 0
Postill, F.	...	...	345 0 0
Sawdon, J. (accepted)	...	...	285 0 0

[All of Bridlington Quay.]

ROBT. ADAMS, 67, NEWINGTON CAUSEWAY, LONDON, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self
Compensating

SPRING HINGES

Guaranteed to
last longer and
work better than
any hitherto made.

CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to
and closes from
the angle of 135°

Fig. 3 is the new
Single Action
Spring. It opens to
and closes from
the angle of 180°
i.e., "wide back."

THE
FIRST SPRINGS
EVER PRODUCED
WITH
THESE GREAT
ADVANTAGES.

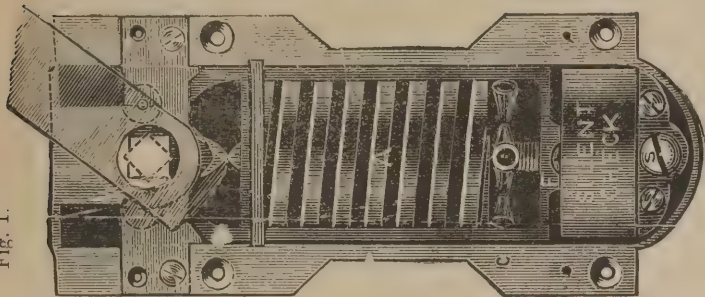


Fig. 1.

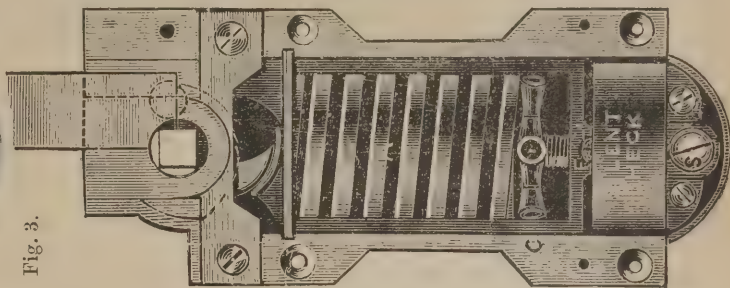


Fig. 3.

BRICKS 2½ or 3 inch PRESSED BRICKS Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

CHICHESTER.—For proposed asylum at Chichester, Sussex, for the West Sussex County Council. Sir Arthur W. Blomfield and Sons, architects, 6, Montague-place, Montague-square, London, W. Messrs. Gardiner, Son and Theobald, quantity surveyors, Great Russell-street, Bedford-square, London:—

Holland and Hannen	...	£149,500	0	0
Woodward and Co.	...	149,400	0	0
Shillitoe and Sons	...	145,000	0	0
Macey and Sons	...	145,000	0	0
Dove Bros.	...	143,995	0	0
Colls and Sons	...	141,888	0	0
Cornish and Gayner	...	138,941	0	0
Thompson, J.	...	137,800	0	0
Stephens, Bastow and Co., Ltd.	...	137,580	0	0
Bywaters and Sons, G. H. and A.	...	136,950	0	0
Goddard and Sons	...	136,500	0	0
Foster and Dicksee	...	135,000	0	0
Dorey and Co., J.	...	129,802	0	0
Rudd and Sons	...	129,719	0	0
Longley and Co. (accepted)	...	114,669	0	0

COLCHESTER.—For the erection of buildings on the Lion and Field Estate, Rowledge. Mr. G. H. Page, architect, Trinity Chambers, Colchester:—

Warricker, J.	...	£420	0	0
Dupont, F.	...	365	0	0
Blaice, G.	...	359	10	0
Rackham, G.	...	358	0	0
Dijs, A.	...	350	0	0

[All of Colchester.]

FROME.—For new maltings at Wallbridge, Frome, for Messrs. E. Bailey and Son. Mr. W. G. Brown, architect:—
Downing and Rudman, Chippenham £5,877 0 0
Wilkins, G. H., Bristol 5,440 0 0
Barnes, Charles, Frome 5,746 0 0
Hibberd and Palmer, Frome 5,054 0 0
Hodder and Sons, Frome* 4,910 0 0

* Accepted.

GUILDFORD.—For the erection of oak fence at the extension to Guildford Cemetery. Mr. A. J. Sturges, architect, High-street Chambers, Guildford:—

Miles, E. and A.	...	£329	2	8
Marshall, Murray	...	319	0	0
Lee, George	...	293	4	6
Taylor and Brooker	...	290	0	0
Ellis, Stanley, Guildford (accepted)	...	274	0	0

GUILDFORD.—For the erection of a common lodging-house, Mill-lane, Guildford, for Mr. W. Tilbury. Mr. A. J. Sturges, architect, High-street Chambers, Guildford:—

Kinglee, Thomas	...	£1,770	0	0
Smith and Sons	...	1,660	0	0
Strudwick, A.	...	1,656	0	0
Johnson, A.	...	1,649	0	0
Ellis, Stanley	...	1,647	0	0
Smith, Robert	...	1,646	0	0
Higlett and Hammond	...	1,503	0	0
May, P. C.	...	1,420	0	0
Tribe and Robinson, Guildford*	...	1,414	0	0

* Accepted subject to modification.

GUILDFORD.—For painting, &c., Cromwell House, Commercial-road, Guildford, for Mr. May Colebrooke. Mr. A. J. Sturges, architect, Guildford:—

Higlett and Hammond	...	£102	0	0
May, P. C.	...	97	0	0
Wood, Robert	...	97	0	0
Ellis, Stanley (accepted)	...	81	0	0

HAVANT (Hants).—For the erection of school buildings for the School Board. Mr. A. E. Stallard, architect, West-street, Havant. Quantities by the architect:—

Light, W. R., and Son	...	£4,284	0	0
Corke, J. H.	...	4,180	0	0
Clarke and Son	...	4,141	0	0
Peters, P., and Son	...	3,890	0	0
Perkins, W. J., St. Paul's-road, Southsea*	...	3,549	0	0

* Accepted subject to approval of Education Department.

LANCASTER.—Accepted for additions to hospital at the workhouse. Mr. J. Parkinson, architect, 67, Church-street, Lancaster. Quantities by architect:—

Harrison, W., masonry	...	£2,479	0	0
Acton, J., joinery	...	790	0	0
Till, T., slating and plastering	...	531	17	6
Harrison and Moser, plumbing and glazing	...	567	12	5
Eaton and Bulfield, painting	...	77	17	0

[All of Lancaster.]

LONDON.—For rebuilding the "Old Fountain" Tavern Catherine-street, Strand, W.C., for Mr. J. Hewitt. Mr. W. M. Yetts, architect, 44, Finsbury-pavement, London, E.C.:—

	Building.	Tenant's Fixtures.	Total.
Downes, W.	£1,476	£230	£1,695
Lawrence	1,420	230	1,650
Gladling	1,388	233	1,621
Hosking	1,377	222	1,599
Faulkner	1,352	219	1,571

LONDON.—For erection of new staff block for domestics and alterations and additions to the male staff block and ambulance nurses' block at the Western Hospital, Seagrave-road, Fulham, for the Metropolitan Asylums Board. Messrs. A. and C. Harston, 15, Leadenhall-street, E.C., architects.

Quantities by J. W. Stevens:—

Windebank and Co.	...	£9,940	0	0
Shillitoe and Sons	...	9,857	0	0
Lawrence, E., and Sons	...	9,677	0	0
Miskin, C.	...	9,400	0	0
Holliday and Greenwood	...	9,149	0	0
Leslie and Co.	...	9,023	0	0
Dearing, C., and Sons	...	8,750	0	0
Johnson, W., and Co., Limited, Wandsworth Common (accepted)	...	8,490	0	0

LONDON.—For shops and flats at Electric-avenue, Brixton, S.W., for Mr. John Fyfe. Mr. W. H. Gibbs, architect, 5, West Kensington-terrace, W. Quantities by Messrs. Jno. Waldram and Son, 17, Buckingham-street, Adelphi, W.C.:—

Higgs and Hill	...	£12,940	0	0
Wall, Chas.	...	12,300	0	0
Rider and Son	...	12,148	0	0
Landisdown and Co.	...	11,939	0	0
Clarke and Bracey	...	11,987	0	0
Dove Brothers	...	11,938	0	0
Dearing and Son	...	11,750	0	0
Nightingale, B. E.	...	11,638	0	0
Holloway Bros.	...	11,630	0	0
Johnson and Co., Ltd.	...	11,590	0	0
Grover and Sons	...	11,378	0	0
Higgs and Higgs	...	11,187	0	0

Quantity Surveyor's estimate £11,985.

LONDON.—For new premises, for the Linoleum Manufacturing Co., Ltd., Old Bailey. Messrs. Searle and Hayes, architects:—

	General.	Sub- Basement.	Total.
Colls and Sons	£10,898	£1,130	£12,028
Higgs and Hill	10,584	1,124	11,708
Lascelles and Co.	9,993	1,025	11,018
Holliday and Greenwood	9,877	1,077	10,954
Ashby and Horner	9,832	1,038	10,870
Greenwood, J.	9,794	986	10,780
Higgs, F. and H. F.	9,589	986	10,575
Patman and Fotheringham	9,140	871	10,011

LONDON.—For re-building the "Red Cow" public-house, No. 67, Mile End-road, E., for Messrs. Sutton, Carden, and Co. Mr. Edward Monson, architect, Acton Vale:—

Lyford, George	...	£4,750	0	0
Godson and Sons	...	4,549	0	0
Wilkinson Bros.	...	4,500	0	0
Wade, G.	...	4,489	0	0
Mitchell, T. E.	...	4,388	0	0
Pattinson Bros., 5, Whitehall, S.W.*	...	4,292	0	0

* Accepted.

CARTER & CO TILES MOSAIC FAIENCE Poole Dorset

RAYLEIGH (Essex).—For the erection of house and stable.

Mr. James Thompson, architect, Southend-on Sea:—

	House.	Stable.
Rayner, J.	£2,560	0 0 0
Johns, M.	2,468	6 6 0
Kimberley, J. S.	2,275	0 0 0
White and Son	2,260	0 0 0
Maxey and Badcock	2,190	0 0 0
Orfeur, C. E.	2,180	0 0 0
Steward, W.	2,147	0 0 0
Cornish and Gayner	2,139	0 0 0
Hordan, S.	2,122	0 0 0
Cirling and Coe	2,130	0 0 0
Dupont, F.	2,080	0 0 0
Brown, J.	1,947	0 0 0

ST. GEORGE (Glos.).—For the erection of class-rooms, &c., at the Whitehall Schools, for the School Board. Mr. J. Mackay, architect, Kingswood, near Bristol. Quantities by the architect:—

Martin, Fred.	...	£1,527	3	1
Tanner, W. J.	...	1,445	0	0
Forse, H. A.	...	1,390	0	0
Wilkins, G. H.	...	1,384	0	0
Hagis, C. A.	...	1,374	0	0
Humphries, G.	...	1,370	0	0
Browning, J.	...	1,340	0	0
Downs, G.	...	1,295	0	0
Wiltshire, J.	...	1,281	0	0
Love and Waite, Backfield, St. Paul's*	...	1,200	0	0

[* Accepted.]

WOKING.—For proposed alterations and additions to Messrs. Knight and Littleboy's premises, Woking, for Mr. William Wells. Mr. A. J. Sturges, High-street Chambers, Guildford, architect:—

Higlett and Hammond	...	£502	0	0
May, P. C.	...	476	0	0
Ellis, S.	...	454	0	0
Whitburn, J., Woking	...	415	0	0
Harris and Son, Woking (accepted)	...	399	0	0

[Rest of Guildford.]

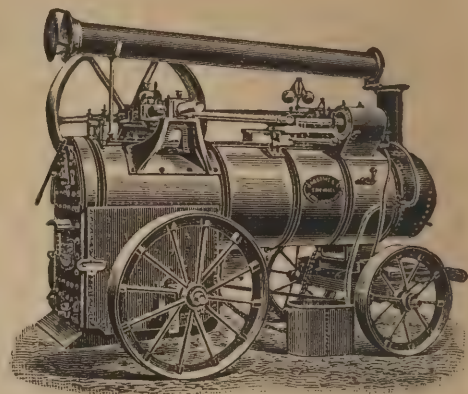
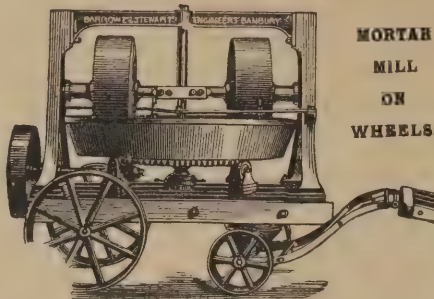
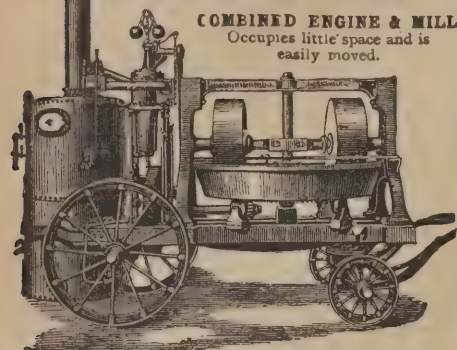
WOKING.—For new stable and store, Woking, for the Friary, Holroyd and Healey's Brewery Co., Limited. Mr. A. J. Sturges, High-street Chambers, Guildford, architect and surveyor:—

Higlett and Hammond	...	£497	0	0
May, P. C.	...	485	0	0
Ellis, S.	...	447	0	0
Harris and Son, Woking (accepted)	...	345	0	0

[Rest of Guildford.]

The Builders' Journal is published at
3 a.m. on Tuesday mornings, and should
be obtained from any Newsagent in the
Kingdom the same day.

BARROWS & CO., LTD., BANBURY.



A Large Stock of Portable Engines, New and Second-hand, 5 to 25 h.p.; Mortar Mills, Plain and on Wheels; Saw Tables, Mortar Tip Carts, &c. ready for immediate delivery, at low prices for cash, or on easy Terms of credit. Write for particulars to:—

BARROWS & CO., LTD., BANBURY.

CONTRACTS OPEN.

TO PAINTERS AND OTHERS.

The Streets Committee of the Commissioners of Sewers the City of London will meet in the Guildhall of the said City, on TUESDAY, the 28th of MAY, 1895, at TWO o'clock precisely, to receive TENDERS for PAINTING the IRONWORK of the BRIDGES on the Holborn Viaduct, agreeably to specification, which may be seen and copied at the Office of the Engineer to the Commissioners in the Guildhall, where forms of tender may also be had.

Security will be required for the due performance of the contract.

Tenders must be endorsed on the outside "Tender for Painting Ironwork of Bridges on Holborn Viaduct," and be delivered at this Office before TWO o'clock on the said day of treaty, and persons tendering must attend themselves, or by a duly authorised agent, at TWO o'clock precisely on that day.

The Commissioners do not pledge themselves to accept the lowest or any tender.

H. MONTAGUE BATES,

Principal Clerk to the

Commissioners of Sewers.

Guildhall,
May 13th, 1895.

BISHOP'S STORTFORD URBAN DISTRICT COUNCIL.

WATERWORKS EXTENSION.

TO CONTRACTORS, ENGINEERS AND OTHERS.

The Council is prepared to receive TENDERS for the following WORKS:—

CONTRACT No. 1.

The construction of a covered service Reservoir (to contain 300,000 gallons) and Cooling Pond, with Valves and Fittings, and Boundary Wall and Gates.

CONTRACT No. 2.

The construction of an additional Well, together with the requisite Rising Main and fittings for pumps.

CONTRACT No. 3.

Alterations and Repairs to one of the Engines and its Gearing, and Alterations and Additions to the Engine House.

Plans may be seen, and copies of the specifications with forms of Tender obtained at the Office of the Surveyor to the Council, North Street, Bishop's Stortford, on and after MONDAY, the 13th day of May instant, on payment of the sum of Two Guineas for each Contract, which sum will be returned on receipt of bona-fide Tenders and the documents supplied for that purpose.

Sealed Tenders, properly endorsed "Tenders for ——" to be sent to me, the undersigned, by TEN o'clock a.m. on SATURDAY, the 25th day of May instant.

The Council does not bind itself to accept the lowest or any tender.

By order,

WILLIAM GEE, Clerk.

Council Offices, North-street, Bishop's Stortford,

May 1st, 1895.

HOLBORN UNION.

The Guardians of the Poor of the Holborn Union invite TENDERS for the POINTING, PAINTING and GENERAL REPAIR, externally, of the OLD BLOCK of the Workhouse, Shepherdess-walk, City-road, N.

Persons desiring to Tender must send in their names to the Architect, Mr. C. E. VAUGHAN, F.R.I.B.A., 25, Lowther Arcade, Strand, W.C., not later than TEN a.m. on TUESDAY, 21st inst.

The specification and form of contract may be seen at his Offices, and bill of quantities and form of Tender obtained from him, WEDNESDAY, the 22nd inst. between the hours of TEN a.m. and FOUR p.m. A £5 Bank of England note must be deposited, but will be returned on receipt of bona-fide Tender.

Sealed Tenders, upon the form supplied, must be delivered to me at my office undermentioned by ELEVEN a.m. on WEDNESDAY, the 29th inst. after which no Tender will be received.

The priced bill of quantities must also accompany the Tender, enclosed in a separate envelope, and endorsed with the name of the person tendering. The contractor whose Tender may be accepted will be required to sign an undertaking to pay his employees the Trades Union rate of wages.

The Guardians do not bind themselves to accept the lowest or any Tender.

By order,

HARRY O. HILL,

Clerk to the Guardians.

Clerk's Offices,
Clerkenwell-road, E.C.
May 16th, 1895.

LADDERS, BARROWS, STEPS,

TRESTLES, SCAFFOLDING,

For Sale or Hire.

J. BATCHELAR & CO.,

48, HAMMERSMITH ROAD, W

Quantities, &c., Electrographed

Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

ENFIELD SCHOOL BOARD.

TO CONTRACTORS.

The Enfield School Board invite TENDERS for the ERECTION of a BLOCK of SCHOOLS at Seventh-avenue, Bush Hill Park.

The plans and specification can be seen, and copies of the bills of quantities obtained, on application to the Architect, Mr. G. E. T. LAURENCE, 181, Queen Victoria-street, London, E.C., to whom a deposit of one guinea should be sent for quantities, which will be returned on receipt of a bona-fide Tender.

Sealed Tenders on the form supplied must be delivered at my office, free of charge, and not later than TWELVE noon on THURSDAY, the 30th May.

Persons tendering will be required to sign an undertaking to pay the rate of wages and observe the rules adopted by the London Building Trades' Federation, and to find two sureties in five hundred pounds each for the due performance of the contract.

The Board do not bind themselves to accept the lowest or any Tender.

By order,

N. HEPWORTH, Clerk,

School Board Office, Court House, Enfield,

May 6th, 1895.

TO PAINTERS.

The Guardians of the St. George's Union invite TENDERS for REPAIRING, PAINTING, WHITE-WASHING, and CLEANING WORKS, &c., at their Infirmary in the Fulham-road, West Brompton.

Persons desirous of tendering may obtain, any week-day up to and including the 21st inst. and between the hours of TEN a.m. and FOUR p.m. (Saturday until ONE p.m.), a specification and form of Tender upon application to the Guardians' Architect, Mr. H. SAXON SNELL, of 22, South-ampton-buildings, Chancery-lane, W.C., and depositing with him a £10 Bank of England Note, which will be returned to persons sending bona-fide Tenders in the manner and at the time stipulated.

Tenders must be signed sealed, and endorsed "Tenders for Painting, &c.," and addressed and delivered to me not later than FOUR o'clock on WEDNESDAY, the 29th inst.

The Guardians do not bind themselves to accept the lowest or any Tender.

By order,

THOMAS WORLOCK,

Clerk to the Guardians.

Clerk's Offices,
St. George's Vestry Hall,
Mount-street, Grosvenor-square, W.
May 15th, 1895.

TO CONTRACTORS.

NEW ENGINEERING WORKS, RUGBY.

CONTRACT No. 1.

TENDERS are required for the CONSTRUCTION of FOUNDATIONS (including Earthwork and Construction of Trautways) for New Engineering Works, at Rugby, for Messrs. Willans & Robinson, Ltd.

Plans and Specifications may be seen at my Offices after THURSDAY next, MAY 16th, and a copy of the bill of quantities obtained on payment of Five Guineas, which will be returned on receipt of a bona-fide Tender.

Tenders are to be addressed to the Secretary, Messrs. Willans & Robinson, Ltd., Piston House, Thames Ditton, Surrey, not later than THURSDAY, MAY 30th, 1895, endorsed "Tender for Foundations, Rugby Works."

The Directors do not bind themselves to accept the lowest or any Tender.

T. W. WILLARD, Architect.

St. Andrew's Chambers, Rugby,
May 10th, 1895.

MANCHESTER CORPORATION.

The Paving, Sewering, and Highways Committee are prepared to receive TENDERS for the EXECUTION of the under-mentioned WORKS (Contract No. 1), viz:—

Laying a system of Underground Telephone Pipes, with Brick Inspection Pits, Service Boxes, and other appurtenant Works in the following streets:—

Route 4. Portland-street, Princess-street, Hart-street, Sackville-street.

Route 4a. Altrincham-street, Lower Albion-street.

Route 4b. Charles-street, Carpenter-street.

Route 4c. Hart-street, Chatham-street, London-road.

Booth-street, Dale-street, Stanley-street.

Route 4d. Dale-street, Spear-street, Bennet-street.

Route 5. Portland-street, Chepstow-street, Great

Bridgewater-street, Albion-street, Little Peter-street

Greaves-street.

Route 5a. Oxford-street, Hulme-street.

Drawings may be seen and copies of Specification, Bills, of quantities, and Form of Tender may be obtained on application at the City Surveyor's Office, Town Hall, Manchester, on payment of £5 ds., which sum will be refunded on the return of the documents and the receipt of a bona-fide Tender.

Sealed Tenders, enclosed in the official envelope, to be sent in on or before the 31st inst.

The Committee do not bind themselves to accept the lowest or any Tender.

By order,

WM. HENRY TALBOT,

Town Clerk.

Town Hall, Manchester.

May 15th, 1895.

COMPETITION.

LEATHERHEAD URBAN DISTRICT COUNCIL.

The Leatherhead Urban District Council invites SCHEMES for the SEWERING of the Parish of Leatherhead, Surrey, and for the DISPOSAL of the SEWAGE thereof. Schemes, accompanied by the necessary plans and tabulated estimate of cost for draining the Parish, are to be sent to me on or before FRIDAY, the 28th day of JUNE next, at FOUR o'clock in the afternoon, under a motto.

A premium of £25 will be paid to the author of the Scheme which shall be considered by the Council to be the first in merit, upon which the Council's decision shall be final, and on payment of the aforesaid sum, the scheme, plans, and estimates shall become the absolute property of the Council, all others being returned at the expense of the Council.

The Council will not be bound to carry out the Scheme for which the premium may be awarded or any other Scheme.

Each competitor must state the percentage he will require to act as Engineer on the work in accordance with his own Scheme and plans in case the same be adopted.

A plan of the Leatherhead Parish can be seen, and further information can be obtained, at the office of the undersigned, between the hours of TEN and FOUR, on any day except Saturday.

No plans will be considered unless the author sends in with his Scheme by separate letter, his name and address together with the name of one or more towns which have been satisfactorily drained by him, together with the estimated and actual cost of carrying out such work.

WM. J. HODGES,

Leatherhead, Clerk to the Urban District Council,
May, 1895. Leatherhead.

SPHINCTER WORKS,

EMERSON STREET, LONDON, S.E.

High Grade Flexible Hoses for Contractors, Engineers, Builders.

FIRE HOSES & HYDRANTS,

HOSES FOR CLEANSING WITH WATER POWER.

Pumping, Suction, & Dredging Hoses.

Always specify "SPHINX" Brand.

The Builders' Journal.

Vol. I., No. 16.

Tues., May 28, 1895.

ILLUSTRATIONS.

Design for Sculpture at the Society of Painters in
Water Colours 241
A Note of Leenside, Nottingham: By Brewill & Bailey 242
The Church of All Souls, Peterboro': By Leonard Stokes 242
Additions to Coldharbour, Liphook: By T. E. Collcutt 243
The Bishopsgate Institute:
E. Harrison Townsend, Architect 243
Perspective Sketch of "A Village Club House":
By Robin Hood 245

The Central Hall of the New Gallery:
E. R. Robson, Architect 246
The Central Hall of the New Gallery:
E. R. Robson, Architect 246
Portrait of Mr. E. R. Robson, Architect 248
The Terrace Front of Sir Sydney Waterlow's House:
E. R. Robson, Architect 248
The Hall of Sir Sydney Waterlow's Country House:
E. R. Robson, Architect 249
A London School: by E. R. Robson, F.S.A. 251
Elevations and Plans for Club Room 254

CONTENTS.

Architectural Modelling 241
Art: Ancient and Modern 242
Architecture at the Academy 242
Bricks and Mortar 244
A French View of London 248

Men who Build, No. 14.—
Mr. E. R. Robson, F.S.A. 248
Anglo-Saxon Architecture 250
Secrets of Picture Making 251
Architecture and Design 252
New Memorials in St. Giles', Edinburgh.. 253

The Advantages of Electric Traction 253
Society Meetings 255
Gas and Oil Engines 255
The Builders' Journal Competitions 256
Trade and Commerce 256

Architectural Modelling. No interested man or woman going into the Architectural Room of the Royal Academy but what will become excited over the charm of Mr. Prior's Architecture and modelling. There appeared in our columns but a week or so ago an interesting article upon the value of models—over mere paper perspectives—for Architectural purposes, and it would be wise if Architects would study in the concrete form what for all intents and purposes may be considered an outcome of it. We do not remember having seen such things at the Academy before, and yet in addition to Mr. Prior's work, unique and quite beautiful as it is, Sir Arthur Blomfield is responsible for a Chapel design rendered by a professional modeller in cardboard in a very weak and simple fashion. Mr. Prior, on the other hand, has done his work delightfully. His ground-work is real earth, his walls are faced with cement to imitate stone, his yew hedge is of sponge and his grass plots of felt, and surely the well-with Truth bubbling at the bottom is as realistic as anything could be! But the mere charm of this piece of design and modelwork is not the end of our ambitions now. It would have been impossible by any geometrical drawings to have shewn the grouping of this house, its fine simplicity, or its perfect proportion of parts, and Mr. Prior has made a lasting benefit to his profession by demonstrating how easy it is to produce an exact miniature of one's Architectural intentions, even down to the minutest detail of colour. We did not know it was even possible to make so charming a thing as this model really is, and for the first time we recognise what a vast assistance to good work modelling can become. It would naturally be impossible to model many architectural

designs. There is no need, where much is not attempted with a grouping of parts or an assessment of fine proportions. Where mass is but *mess*, or where nothing but a flat front is exposed to view, models may be discarded, but where, as in Mr. Prior's design, grouping and proportion and mass are everything, then one wonders how on earth modelling has not asserted its wonderful artistic capabilities and value before. How charming Mr. Skipworth's design for his Fulham Church would have appeared in a scale model, instead of a perspective wash drawing, poorly illus-

expect to see a great development of Mr. Prior's example. Mr. Reginald Blomfield will have to model some of his buildings if he wishes to do justice to his art, and so likewise will Mr. Caroe and Mr. Wilson and Mr. Leonard Stokes. Even if Mr. T. G. Jackson, and Mr. Champneys, and Mr. Norman Shaw should, in the fullness of their renown, elect to turn up their noses at so striking an innovation, the Architectural Association should at once commence an Architectural Modelling Class, and Mr. Prior should be its first master. The question of the expense or

modelling need not trouble us yet, neither need we be frightened by the rumours—rumours which, in the absence of any authoritative statement, we must discount—that the model of Sir Arthur's Chapel in the Academy cost £300. The late Mr. Devey made models of all his buildings, and did not expend a fraction of this sum on any one of them, nor need we do so, unless we wish to develop the primary benefits of modelling into the very depths of the art, which produces real brass knobs or real framed doors and kitchen ranges suitable to dolls' houses! The materials for producing a card and wood model of any house made to half



DESIGN FOR SCULPTURE AT THE SOCIETY OF PAINTERS IN WATER COLOURS.

trative of what thus appears to be a poor building! Take Mr. Norman Shaw's house (1460), had that been by model it would not have shown the mark of other hands, as is very clearly discovered from the perspective sketch. In a model Mr. Shaw would instantly have discarded that chimney stack as unworthy of England's leading domestic Architect. And Aston Webb's amazing "Cottage" (1529), how much more truly picturesque and beautiful it would have appeared under Mr. Prior's delicate handling, instead of by the clever drawing which alone distinguishes it! From henceforth we shall

inch scale, would cost but a few shillings, and the requisite tools but a few shillings more. The elaboration of the model depends entirely upon the cleverness of the modeller, and whether his fingers are not all thumbs at wood turning and carving. Mr. Prior must have devoted hour upon hour to the model of his beautiful house, but then they were hours of love, and his labour will bring to the Architectural Room of this year's Academy more persons totally and sublimely ignorant of Architectural Art, than could be induced to enter were there ten times as many fine drawings upon its walls.

Art: Ancient and Modern.

It is the vogue to speak of Bankrupt Art, but the recent Art Sales give the lie, in pounds, shillings and pence, to the assertion that we have all become beggars. Beggars may not be choosers, but the connoisseurs who flock to Christie's go on choosing and paying. It has been quite a sale epidemic, and some noted collections have been dispersed—a sad thing when you come to regard the labour and years spent in collection. There was the Craven sale and the Kennedy sale and the Woolner sale—all of pictures—and the Lyne Stephens sale came, with all the effect of red fire and slow curtain, to wind up the lot. Something like a quarter of a million has been spent within a fortnight with Christie and Manson, and modern Art murmurs all the more at this very sterling tribute to the dead. But it seems to us that modern Art distinctly does *not* supply a "long-felt want." People are not always desirous of their own portraits (for which escape we are devoutly thankful) and the fact of the matter is that the Crafts allied to Art have not yet managed to compete in charm, dexterity, or grace, with their mediæval competitors. So far as pictures go, there is a literal "boom" (if we may be permitted the word) in Italians and Spaniards and the great Dutchmen whom Mr. Seymour Lucas has been extolling. Buyers now-a-days, are in want of a sure thing; one which, if you cast your bread upon the fluctuating waters of the Sale Room will return after many days. So few of the modern men last out their own lifetime—a more figurative way of saying that they outlive their reputation. With the Academy each year in view, canvases have to be turned out at express speed. Only here and there is a man strong enough to "disappoint" his Academy and his "public." Curiously, while the Moderns go down in "quotations" the Ancients still go up—a Velasquez has doubled itself in thousands in a few years; a small Murillo in half a century has become more valuable by one hundred and twenty five per cent., and a Cuyp has grown in goodness from five hundred and thirty to two thousand guineas. Watteaus, that have been despised in very recent days by a certain "School" are now in three thousands! Does not all this mean that the section of the "public" able to buy, demands something more than a rocket reputation with its attendant stick? The public wants a safe investment in Art as in everything else; it cannot afford to fling money into new Art currents for fear lest those currents should not prove tidal. Decent objects of vertu, craftsmanship and exceptional guaranteed art names are what can be "sold" now-a-days.

It has been decided that the memorial of the public services of the late Dr. Dale shall consist of a Statue to be placed in the Art Gallery, Birmingham, and the provision of a gold medal to be annually awarded in connection with King Edward's School.

THE TOWN Council of Weston-super-Mare has received sanction from the Local Government Board to borrow £4,600 for the erection of a new Market.

THE TOWN Council has agreed to repair the roof of the Chancel of St. Mary's Church, Bury St. Edmunds. The Borough Surveyor has estimated the probable cost at from £230 to £250.

TENDERS have been accepted for the erection of a new Roman Catholic Church, to be called the Wake Memorial Church, at Sunnyside, near Halifax, at a cost of £4,000.

LONDONERS are soon to have an opportunity of seeing the Statue of Ada Rehan in solid silver, as "Justice," which was shown at the World's Fair, Chicago, and was the great feature of the Montana Section. It is nine feet in height, and contains 97,000 ounces of silver.

ARCHITECTURE AT THE ACADEMY.

BY OUR SPECIAL REPRESENTATIVE.

WITH SKETCHES BY C. E. MALLOWS.

MR. COLLCUTT'S refined and characteristic work at the Holborn Restaurant (No. 1,566), with which every one is well acquainted, is illustrated by a capital wash drawing, bearing the signature of Mr. Frank Murray. The decoration of the roof to the same Hall is shown in drawing No. 1,543, by Messrs. Shrigley & Hunt. There is a pleasing little Interior of Waxwell Farm, Pinner, (No. 1,578), by Mr. Seth Smith, but this drawing and No. 1,577, by Mr. William Wallace for "Philliphaugh" Selkirk, are both hung too high for criticism. The latter seems to be a



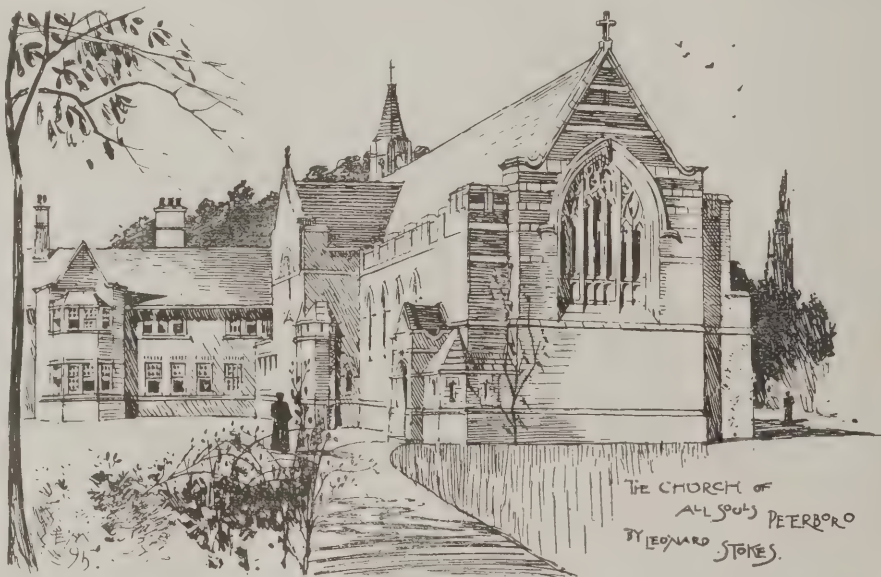
mansion designed in a typical and somewhat uninteresting type of Scotch Baronial, and is illustrated by a wash drawing in Indian ink.

There is character in No. 1,557, which inadequately illustrates Mr. Cave's "South Front of Eventyde." Much more could have been made of the designs in the drawing, in which there is much nice feeling, however. Mr. Phené Spier's water-colours are always admired, and No. 1,556, "Wolgangs," Kirche, Rothenburg, will be no exception, as it is an excellent example of his work. No. 1,564 is another delightful water-colour of "Dalethorpe Dedham," by Mr. Beresford Pite. It is drawn with much vigour and freshness of handling, but, with regard to the design, we object to Mr. Pite's

merits of the work itself. The reverse of this remark applies to No. 1,585, "The Hall of a Small Country House," by Messrs. Baillie Scott and S. Morris; it is admirable and unconventional in design as will be seen by the accompanying sketch, and marked with much homely character, but the drawing, good as it undoubtedly is, hardly does the design justice. The Public Library, by Mr. Percy E. Newton (No. 1,588), is a design well expressive of its purpose, has much breadth of treatment generally, and of good proportions. The idea of the sculptured decorative band over the Entrance is good, but the figures should have been more carefully studied and drawn. But taken as a whole it is a very promising effort. The frame of No. 1,591 contains "Three alternative Treatments for the Study," illustrated by line drawings with slight washes of colour. The simple treatment of the lower design is preferable to the others.

They are good pen sketches illustrating an able design for a house at Woodside Park, London, N. (No. 1,590), by Mr. William T. Walker. The drawings are by Mr. Richards. No. 1,595 is the Interior view of the Staircase of Gosford Hall, the drawing is better than the design, and is conspicuously signed in the bottom left-hand corner by Mr. William Young, Architect. Another contribution by the same Architect is No. 1,484, a large Mansion called "Duncombe Park," which leads us to another part of the room altogether, and close by Mr. C. R. Ashtee's delightful restoration of the "Magpie and Stump" (No. 1,487), in Cheyne Walk, Chelsea. It is illustrated by a tinted elevation, drawn (with much artistic feeling) in bronze ink on parchment, with plans of each floor arranged in the lower part of the frame. There is a nice subdued red colour in the tone of brickwork, and a well designed oriel, corbelled on the basement window, runs nearly the height of the building and finishes with a flat stone cornice under the windows of the top-floor. The whole design of the high and narrow front terminates under the eaves by a flat stone cornice, with a rather heavy enrichment of egg and tongue, not too heavy perhaps for its position, but it seems somewhat so in this elevation. A perspective view would, of course, have given its correct relative effect, which is another reason why elevations should not be used to interpret designs. It is impossible to realise what the finished effect of a building will be like from elevations only, whereas a careful illustration in perspective will give it very nearly.

Near to this Mr. Tulloch exhibits his Com-



treatment of the angle chimney which is not so successful as the gable end; this latter is very pleasing with the high curved parapet as a forehead over the billiard room window, with canopied niches at the angles. This is another example of a small drawing carefully hung out of sight.

An attractive little frame is No. 1,584, "Small Country Houses," by T. W. Cutler; but the attraction is more in the way Mr. Raffles Davison has illustrated the houses than in the

petitive Design for New Municipal Buildings at King's Lynn, (No. 1,493), a design in harmony with the existing quaint old work. We believe Mr. Ivor Price was awarded the first premium in this competition. In another part of the room (No. 1,579) Mr. Tulloch shows a half-inch detail of his New Bank at Halifax. The drawing is of a portion of the Principal Front, a good piece of Classic work, showing the influence of the *Ecole des Beaux Arts*, where, perhaps, Mr. Tulloch has studied. Messrs. Horsfall &

Williams show in No. 1,458 their design for the same subject, which was awarded the first premium. Saint John's Seminary at Wonerst (No. 1,576), by Mr. F. A. Walters, is another type of building altogether, and is not so successful as some of Mr. Walters' previous works. We like his Gothic buildings better than this attempt at Renaissance of an ordinary and uninteresting description. The drawing is very strong in colour (especially the tone of the very red brickwork), but there are points, especially where some of the foliage and distant country are indicated, which show a sympathetic hand.

Mr. J. M. Brydon has, in his revised design for the Pump Room Buildings at Bath (No. 1,554) a sound piece of Classic work, treated with much individuality, although it is difficult to admire the outline of the dome which crowns an otherwise able design. It is illustrated by a weak and colourless drawing in sepia. The

genius. There is nice quality in some of the lines, and Mr. Percy Robinson has, at all events, illustrated his subject "The Norman Porch of Adel Church, Yorkshire" in a very thorough and complete way. Amongst other illustrators of old work, Mr. Arnold Mitchell sends some crisp and clear pencil studies, illustrating a recent article on a tour in Normandy (No. 1,523). Mr. Gerald Horsley shows in No. 1,425, the "West Front of Wells Cathedral," a pen drawing not quite worthy of Mr. Horsley's reputation. Mr. T. G. Jackson, who has in the "Interior of St. David's Cathedral, showing the Choir Screen" (No. 1,486), a water-colour drawing of much delicacy and charm. Mr. Needham Wilson exhibits a tenderly drawn illustration in pencil of "Malmesbury Abbey from the South" (No. 1,439), which well illustrates the subject. The "Nave Arcade of St. Anastasia, Verona" (Nos. 1,503 and 1,522), has been well and carefully drawn by Mr. Huber,

more expressive of a better class warehouse than a Tabernacle, so little there is to mark its religious purpose.

Mr. Frank A. Bright has a "Sketch for Village Church" (No. 1,505) of apparently much merit, but as it is hung nearly as high as it well could be it is difficult to judge of it in detail. Two capital water-colours illustrates Mr. Brigg's "Country House at Oxted" (Nos. 1,506 and 1,518). The former shows the Entrance and the latter the Garden Front; the Entrance Front is the more pleasing of the two, and is simpler and quieter in treatment generally, both in drawing and design. It is much more clearly handled than No. 1,518, which is a trifle woolly in execution, and the design is rather restless and over-featured. From what can be seen of Mr. William A. Pite's design for "A Small Artist's House" (No. 1,513) we should say it is most artistic, and ably illustrated by the coloured elevations.

No. 1,510, "The Gables, Harrow," is a bright and clever sketch in sepia by Mr. Arnold Mitchell, but this, as with his other excellent contribution—"House, S. Margaret's, Harrow-on-the-Hill (No. 1,575)—is rather obviously founded on Ernest George, not only in the general effect of the drawings but in design as well, and also in small points of technique.

The "House by Racecourse, Lingfield," by Mr. E. Turner Powell (No. 1,520) is illustrated by a good water-colour drawing, and shows a fairly proportioned house in rough cast, red brick and half-timbered gables.

The design by Mr. Gerald Horsley for the New Chancel, Ipstones, Staffordshire (No. 1,527) has much merit of a quiet and subdued kind, and is illustrated by a pen drawing bearing his well-known signature.

The competitive design for the Church at Abbeydale, by Mr. Skipworth (No. 1,586) is rather florid Gothic in style and a little restless in parts, but this is counterbalanced by a well



same Architect exhibits a rather hard line drawing, (No. 1,574) of the "Château de Buillon."

The drawings in the frame No. 1,548 illustrate an interesting Church, "SS. Michael and All Angels, Colehill, Wimborne," by Mr. W. D. Caroe, the newly appointed Architect to the Ecclesiastical Commissioners. We like the Pulpit, which is better both in drawing and design than the other illustrations, which scarcely do justice to the Architecture. No. 1,596 is the "Palazzo Hanburg Ventimiglia, Italy," by the same Architect. Mr. George Kenyon in 1,550 and Mr. H. O. Cresswell in 1,545 show good examples of Domestic work, the latter, "A New House at Effingham, Surrey," and the former, "Eastwood Cottage, Walterswick," illustrated by a small water-colour; and No. 1,593 is a bright little water-colour drawing, by Mr. James Ransome, of a house near Leicester. The accompanying sketch indicates the main features of the design; the stables are to the left of house, but do not compose very well with it. Mr. Reginald Hallward exhibits in No. 1,594 seven beautiful working designs for Embroidery, and another exhibitor, who is also not very Architectural, is Mr. Albert A. Turbayne, who shows in frame No. 1,539 a magnificent cover design for the édition de luxe of "Masterpieces of Art, 1894."

There is again much charm but very little Architecture in No. 1,598, Mr. Inigo Thomas' view of Church, House and Garden (principally the latter). The general effect of the picture is dark and mysterious, and conveys an impression of an old-World garden and surroundings at eventide. Mr. Ambrose Poynter's "Design for a Suburban House," (No. 1,597), is aggressively ugly and painfully bald in appearance, and is not in any way redeemed by the sepia drawing which illustrates it.

No. 1,604, "House at Bowden, Cheshire," by Mr. Edgar Wood, has some of the qualities of the previous exhibit, and rather affectedly drawn in the manner of a certain famous drawing for a "West End Club" of some years ago. Apart from the drawing, however, the design has many good points, and is worth noting. No. 1,589 is an example of the immense capacity for taking pains which is not precisely

C. Conlette, showing the colour decoration and design of mosaic pavement. Mr. C. E. Mallows' contributions are from Gloucester, one of the "Scriptorium Side of the Cloisters of the Cathedral" (No. 1,563), a pencil drawing which shows a care for the chiaroscuro of an intricate and wonderful subject, and the other a bright and telling pencil sketch of the "Deanery from the Cloister Garth" (No. 1,485); Mr. Francis W. Bedford's "Loggia Vatican, Rome" (No. 1,602), and Mr. Alfred Hart's (No. 1,565) "Marble Screen and Throne in St. Lorenzo, Rome."

Mr. Seth Smith has a view drawn in pen and ink of Little Missenden Abbey, Bucks (No. 1,488).

No. 1,549, "The Anglican College, Jerusalem," by Mr. Jeffrey, F.R.I.B.A., is a hard and unfeeling line drawing of an ordinary Gothic design; we see no reason why this exhibit should be placed in such a prominent position. It certainly has merit, and is a design in parts, showing an appreciation of old work, but is not of sufficient importance to justify its being in one of the best positions in the room.

In Mr. Ernest Newton's (No. 1,414) design for the Interior of the Church of Saint Swithin, Lewisham, there is much to admire. The severely simple lines of the type of Late Gothic he has chosen, the design of the tracery for the West Window, and the breadth of effect generally, are all worthy of praise, and remind one a little of the influence of Mr. Norman Shaw.

Near to this hangs "Sir Frederic Leighton's Picture Gallery" (No. 1,418), an addition to his house in Holland Park, by Professor Aitchison, a refined arrangement in colour, or it would not be the work of the Professor; but the Architecture does not appeal as being very brilliant.

The same can with much more certainty be said of No. 1,413, "The Chapel of Cheltenham College," by Messrs. Prothero and Morris, a heavy and ordinary type of Late Gothic, drawn by Mr. Brewer.

Apart from the pen drawing, which is by Mr. Roland Paul, there is little of interest in design No. 1,502, "New Tabernacle, Woolwich," by Mr. Walter H. Woodroffe. As a design it is



THE BISHOPSGATE
INSTITUTE
C. HARRISON TOWNSEND
ARCHT.

No 1500.

managed blank wall space. The drawing is in pencil, and wanting in force and life.

(To be concluded.)

THE Stamford (Lincs.) Board of Guardians purposes building a new Workhouse at an estimated cost of £5,000.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
28th May, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE leisurely way in which the Statue to Lord Strathnairn is being erected at Knightsbridge can only be described as irritating in the extreme. In fact, the method of procedure has been a source of amusement to those who pass by daily, and many have been the comments as to the cost of the pedestal and the considerable funds which must be in hand to meet it. The site can hardly be called a happy one so long as the hoardings continue to occupy that No Man's Island behind it.

OUT of nineteen designs for the new Workhouse for the Ipswich Union, six have been selected which will be submitted to an Architect as assessor for him to award the premium. The Workhouse Election Committee was of opinion that the new Workhouse need not exceed in price the sum of £20,000; and though the Architect's estimate in one or two cases somewhat exceeded that amount, the Committee considered that, with certain modifications, it might be reduced to that figure. The Committee, deeming it advisable that the assessor appointed should be one in whose decision all the competitors might have confidence, asked the President of the Royal Institute of Architects to recommend some Architect to them. He recommended Mr. Charles Barry, whose fee would be 50 guineas, and travelling and hotel expenses. The Committee accordingly recommended Mr. Barry's appointment. The Rev. Wickham Tozer advocated securing the services of a local Architect, which he considered would entail less expense. He moved as an amendment that Mr. Brightwen Binyon be asked if he would accept the position, and the fee he would receive. A Mr. Gower seconded. Mr. J. B. Fraser supported the recommendation of the Committee, observing that there should not be the slightest suspicion that local prejudice would be brought to bear in making the awards. On the vote being taken, nine voted for the motion and eleven for the amendment, which was therefore carried. Mr. Borrett, upon the substantive motion being put, moved a further amendment that Mr. Eade be approached in the same way as Mr. Binyon, and this was also carried.

A NUMBER of Manchester capitalists have formed a company with a capital of £20,000 for purchasing the Gorsey Hill and Stoney Hey Estates, comprising the loftiest eminence in the Wallasey district at New Brighton, which commands a magnificent view of the Rock Channel, the approaches to the Mersey and Dee, and the Snowdon and Carnarvonshire Ranges. It is intended to erect a Tower on the summit of the hill. The

grounds will be laid out on the lines of Belle Vue at Manchester and the Douglas Pavilions and pleasure grounds, and provision is to be made for a football ground, surrounded by a racing and cycling track. The Company has secured Mr. Huon A. Matear, F.R.I.B.A., of Birkdale, to develop the undertaking.

AFTER long pondering over the subject, the Chancellor of the Exchequer has at length determined to find the money necessary for the widening of Parliament Street at the end facing Westminster Abbey and leading up to the Houses of Parliament. This piece of work has long been a temptation to the speculative builder. There is now before the House a Bill promoted by private persons providing for the compulsory purchase of the land in the neighbourhood of Charles Street and Delahay Street. The intention was to pull down the block of houses that disfigure this end of Parliament Street, and make a new street with houses reaching as far up to the sky as the regulations of the County Council will permit. The plan of the Government is more gracious, it being intended to clear away the block of houses and approach Westminster Abbey with a broad sweep. The work, when completed, will make Parliament Street one of the finest Avenues in the World, opening up for the greater part of its distance, a view of the Abbey and the Houses of Parliament.

WHEN the London County Council was accused of wasting the ratepayers' money by painting Hammersmith Bridge in the winter, its apologists replied that the Council was only carrying out Mr. Balfour's advice, given at Manchester, that as much municipal work as possible should be reserved to the winter. The absurdity of the defence was sufficiently obvious at the time. Its dishonesty is now being illustrated. For more than a month hundreds of workmen employed by the Works Department of the County Council have been engaged in remaking the Thames Embankment. This is work which not only could be reserved for the winter, but for which wet weather is actually better than dry. All over the country road making is carried on through the winter and late autumn. It is only in London that gigantic road making operations are reserved till the spring and summer, when the water cart has to be employed to do the work of the winter rains; when masters have to hunt for men instead of men for masters; and when the maximum of inconvenience is caused by the stoppage of the traffic.

A WATER-COLOUR drawing by that long neglected artist, David Cox, sold at Christie's for the large sum of 2,400 guineas. It was 29 in. by 40 in., and represented "A Welsh Funeral" at Bettws-y-Coed. Some years ago it was won as a £20 prize in the Art Union of London, but the owner re-sold it to a dealer for the same price. After a few years when the "boom" in Cox drawings came up it passed to the late owner for £500, and was on loan at Leeds in 1868, and at Manchester in 1887. A view near Highgate, by J. Constable, made 180 guineas, and "Off the Northumbrian Coast," by J. S. Cotman, 260 guineas.

It is customary, during the summer months, for the Council of the Institution of Junior Engineers, to organise fortnightly tours of inspection to various buildings of which the machinery is a prominent feature. The other afternoon was devoted to the Imperial Institute, and, thanks to the courtesy of Sir Frederick Abel, Sir Somers Vine, and the chief engineer, no fewer than a hundred "junior engineers" were enabled to inspect the heating, ventilating, lighting, hydraulic, and other engineering features of the build-

ing. The systems of heating and ventilating such a large structure attracted much attention, especially the ventilating operation, which is carried out by means of air-compression and water-sprays. The engineering plant is naturally a very extensive one, and much time was spent in inspecting the various points of interest, which included two Galloway superposed steam-engines capable of indicating at 100lb. pressure 180 horse-power, the diameters of the cylinders being 13 in. and 22 in., the stroke 33 in., and with ninety revolutions per minute. Much interest was displayed in the fire appliances, which were fully explained by the engineers in charge of the two parties of visitors. Subsequently the Exhibition of Photography was inspected.

ANOTHER of the familiar buildings in Blackett Street, Newcastle, is being razed to the ground—the well-known shop of Messrs. Allan, booksellers and newsagents, having been doomed by its owners to make way for a better building. It seems strange, looking at the old brick fronts of some of the houses in Blackett Street, to realise the fact that there are persons treading the thoroughfare to-day who can remember when there were no houses there at all. Little more than seventy years ago—what is certainly one of the busiest streets in Newcastle, if not the busiest—was nothing better than a dust heap. There were no houses or shops near. The town wall occupied the south side, and a few miserable gardens we are told held the ground further north. The town wall having been removed, however, Newcastle began to expand, and Blackett Street was built in 1824. There was no intention then on the part of Architect or builder to make shops. It was simply a residential centre. But the shops came. Messrs. Allan now intend to build on the site of their old shop a stone building similar in height and appearance to the premises they are temporarily occupying, and the Architectural features of that part of Newcastle will in consequence receive an addition.

RELATIVE to the strike of Carpenters and Joiners at Leeds, a "Builder" writes: the state of trade in Leeds does not warrant and cannot afford a rise of wages at all, and local trade cannot and does not find adequate employment for local workmen. If it were not for the enterprise of many of the Leeds builders (who have rents, rates, taxes, &c., to pay, which cannot be got out of work executed in and about the city of Leeds) in obtaining contracts and orders from outlying places, including Harrogate, Walsall, Sheffield, Newcastle, and many others, the larger portion of the labour for which is done here, the carpenters and joiners would not be half employed. As to the rate of wages and cost of living now and some years ago a contrast is instructive. About 34 years ago the wages were 4½d. per hour for 58 hours a week, and four years later they were 5½d. per hour for 56 hours a week. Then the workmen had to provide a kit of tools costing fully £20, and had the hard, heavy, laborious work to do. Now a kit for a first class man need not cost more than £5, and the hard work is done by machinery.

THE Villa recently purchased by M. Faure at Ste. Adresse, near Havre, is to be put into a state of thorough repair and enlarged. He has agreed on a plan with his Havre Architect for the additions. A Wing will be added at one end of the house, containing a Dining Room large enough to accommodate fifty persons, and a roomy Study and a Morning Room for the President. The Wing at the opposite end will be appropriated to a postal and telegraph service, and to the military guard. The Architect promises to have all ready by the end of July.

ACCORDING to the *Petite République* a party of about 200 members of the British Society of Naval Architects, including a number of eminent authorities on the British Navy and on British maritime industry, will arrive in Paris on June 12th, and will hold three meetings in the Amphitheatre of the Sorbonne. The journal adds that the Minister of Marine has instructed a Committee, presided over by Admiral Duperre, to make arrangements for receiving the English visitors with some ceremony. Co-operation has also been asked for the same object from other quarters. Soirées and banquets in honour of the visit will be given, not only by Admiral Besnard, Minister of Marine, but also by the Paris Municipal Council and the Paris Chamber of Commerce.

At the meeting of the Association of Municipal and County Engineers at Plymouth reference was made to the important results which flow from the attention paid to Sanitary Science in our day. By the provision of good supplies of pure water, the extension of drainage systems on scientific principles, and some attempt to ensure the erection of healthy dwellings, towns were gradually being made more habitable. The papers read by Mr. J. Paton, borough engineer, and Mr. E. Sandeman, water engineer, gave an admirable account of the municipal works now in progress in Plymouth. They showed, moreover—and this especially applied to Mr. Paton's paper—how much needs to be done before anything approaching perfection will be reached in local sanitation. The great problem to be solved is that of the housing of the working classes. Plymouth is greatly and increasingly overcrowded. At the last census, when it was stated that 26 per cent. of the population of the town was "over-crowded," there were 9,635 houses and a population of 84,253. In the four years which have since elapsed the houses have increased to nearly 11,000 and the population is estimated to have grown to 89,000. To-day there is an average of nearly nine persons per house. It is satisfactory, therefore, to have the assurance of the borough engineer that building operations will be soon commenced at Prince Rock. Devonport and Stonehouse will have to follow suit.

ANOTHER new idea emanates from Chicago. The City has originated a Circulating Picture Gallery, starting it with 50 framed pictures. The arrangement is that each picture may be taken out for two weeks at a time, and the privilege may be once renewed. By this means the member is able to add a little change to the mural adornment of his walls, and the idea is said to have "caught on." The Circulating Picture Gallery seems a method of bringing Art to the people; but it can only apply to lower-priced paintings.

MR. G. F. WATTS, R.A., again gives proof of great interest he takes in the work of the Society known as "The Home Arts and Industries Association," by presenting it with a cheque for 1,000 guineas towards the endowment fund, which he and Mrs. Watts are raising, a fund badly needed to place the Association in a sound position. The public will have an opportunity of becoming acquainted with the work which the Association is doing by visiting the Annual Exhibition, which will be held this year on June 13th and following days at the Albert Hall.

OUR attention has been called in a letter from Paris to a novel device for providing with a living a workman who had been dismissed by his employer, and who was unable to obtain a place elsewhere. Citizens are evidently of a philanthropic turn of mind at Romilly-sur-Suine, in the Department of the Aube. The workmen's syndicate in that part of the country assembled to consider ways and means, and it hit upon the idea of enjoining the local Mayor, who is also an *ouvrier*, to resign his post, and thus make room for his comrade, who is an active Socialist, and could ill be spared by the politicians of his party. According to the law no salary was to be paid to the Mayor, but the retiring functionary had received as compensation for loss of time 365*f.* per annum, and a resolution was passed that this sum should be increased, so as to enable the man who was out of work to earn a comfortable subsistence as head of the municipality. Unfortunately for this bright scheme, the authorities will in all likelihood have something to say in the matter which will not be altogether to the taste of such a philanthropic spirit.

By the narrow majority of two, the Manchester City Council has declined to appoint a Committee to inquire into the advisability of re-arranging and extending the work of the Art Gallery Committee and of obtaining the services of an Art Director to assist them. Their decision is to be regretted. There is

the land it occupies, close upon £100,000. It is certainly to be regretted that Mr. Ewan Christian, the Architect who designed it, should not have lived to witness the final completion of his work.

THE Committee appointed by the Board of Trade to recommend a standard for testing the illuminating power of gas in substitution of the candle standard has presented its Report. It finds that the flame of the Parliamentary sperm candle does not furnish a satisfactory standard, and that it is desirable that the standard should be produced by the process of combustion and of the nature of a flame. No time is to be lost in giving effect to the Committee's recommendations, and a short Bill for the purpose may possibly be promoted during the present Session of Parliament.

ANYTHING about teak is of importance and Vice-Consul Black's report on the teak forests of Siam, compiled during his recent journey to Paknam and Nakonsawan, will doubtless be read with interest. The forests lie, for the most part, to the east and north east of Moulmein, between that port and Luang Prabang. Although some of the forests are said to have been worked for half a century, it is only within the last 10 or 12 years that the industry has reached large dimensions. The trees are first "girdled," that is, incised all round the trunk at a height of four feet from the ground—when they are in flower.

They are then left to die and dry, and are subsequently cut down, marked, and floated down the forest streams, to which they are dragged by elephants, until sooner or later they reach their destination. Elephant labour plays a conspicuous part in all the operations. There is a good deal of timber stealing; but a more serious business is the cutting of saplings, a practice which

threatens to ruin the trade by preventing the renewal of the forests. The local authorities are strongly urged to insist that no tree with a semi-girth of less than 21½ inches shall be felled.

HAYES, one of the farms on Lord Poltimore's Estate, may well be described as a model farm, for it has to a great extent been entirely rebuilt; a new Wing has been added to the house and a new range of sheds have also been erected. This has been done in accordance with plans prepared by Mr. Wreford, Clerk of the Works for the Estate, and carried out under his supervision. Every care has been taken to make a substantial structure, and to render the sanitary arrangements as perfect as possible. The front building is about 100 feet long and 15 feet wide. At the east end, on the ground floor, is an Engine-room, with a Crossley four-horse power engine, of a design which contains many improvements on the exhibit which was awarded the prize at the Royal Show at Cambridge; adjoining this is a pulping and mixing room, a root house, a granary, and a manure house, whilst the floor above forms a spacious loft. At right angles with this building is a large shippen for bullocks, with loft over, and another root house and cellars at the south end. On the west side is a long cattle shed, splendidly arranged; and the square will be completed with stabling, that is now in course of erection, the whole of the building enclosing an extensive manure yard. Tram rails are laid throughout the

Design for a "Village Club House":



PERSPECTIVE SKETCH, BY "ROBIN HOOD."

not a single Gallery of the first importance in Europe in which this one-man power is not the very keystone of the structure. In this connection the name of Birmingham must always be mentioned first, for Mr. Whitworth Wallace, the Art Director to the Birmingham Corporation, has made the Art Gallery of that city, with its annexe at Aston, one of the most successful institutions of the kind in the World. As another example, there is the Dublin National Gallery, where Mr. Walter Armstrong is building up a small, but remarkably fine collection of works, typical of the best Schools of Art. In each instance good results have been attained, nor is there any apparent danger lest either the Birmingham or the Dublin Gallery should become a "one-man collection," as one of the speakers feared would be the case if the Manchester Art Gallery were put in charge of a Director instead of a Committee.

We are glad to be able to announce that at the end of this month the new National Portrait Gallery at Charing Cross will be ready for the reception of the Art treasures that have so long been knocking about without any settled home. Its walls have had ample time to dry, and the only thing remaining to be done, the work of distemping and papering, has been commenced. Before the 1st of June this will have been completed, and nothing will remain to be done but the hanging of the pictures and the ceremonial opening of the building, which has cost altogether, exclusive of the value of

place for conveying the roots and fodder to the spots where they may be required in specially constructed trolleys. Water has been brought in from a well in a field above the house, and it is interesting to note that the supply was discovered by means of the divining rod. The whole of the machinery on the premises, which with the tramways and engine have been fitted by Messrs. Wm. Brenton & Son, of the East Cornwall Iron Works, St. Germans, is of the most modern description. On the ground floor is a root cleaner—which also acts as a feeder—and pulper. In the room above are an oil-cake mill, a grinding mill, a corn cutter, and chaff cutter.

THE Chancel Window at St. Luke's, Queen's Park, Brighton, has just been completed by the filling in of the four remaining lights with richly-stained glass. These four lights represent the Annunciation, the Nativity, the Resurrection, and the Ascension, and together with the centre light, which was put up two years ago, and represents the Crucifixion, form a very striking Window. The unveiling and dedication ceremony took place on Ascension Day.

At a meeting of the Leeds Building Trades' Federation the following resolution has been adopted:—"That this Federation urge the Leeds School Board to adopt the suggestions offered by the employers and employes engaged in the painting trade of Leeds, believing that such a course will be beneficial to the health of children attending the Schools, and in the best interests of the ratepayers of this city." The suggestions are as follows:—(1) That the colour of the distemper on the walls be changed each time, so as to ensure the walls being properly washed. (2) That all work to be re-varnished shall be washed by painters. (3) That one member of the Master Painters' Association and one of the operatives be allowed to visit the Schools during the cleaning, and to examine the work being done. (4) That where a doubt exists as to an employer paying the standard rate, his wages book shall be examined. (5) That a number of the Schools be done during the winter holidays.

MR. J. P. NORRINGTON, Surveyor to the Lambeth Vestry, in his report published at the end of his first experiments in street paving, states that he saved the Vestry no less than £1,146 on the paving of three roads. At the end of 1894, Mr. Norrington became Surveyor to the Lambeth Vestry. Jarrah is the wood used for paving in the Lambeth district, whereas in Fulham but very little of this wood is laid, the greater part being plain deal or creosoted deal. Wherever possible the old deal paving is being substituted by Jarrah paving. In the wear of the two materials the comparison is tremendous. A block of Jarrah wood laid in Westminster Bridge Road in May, 1888, and taken up in February, 1895, had been worn only one inch and a sixteenth. This block was taken from the centre of the road. A paper on the use of Karri and Jarrah for wood paving, which Mr. Norrington read at a largely attended meeting of the Association of Incorporated Municipal and County Engineers, is full of information. In comparing the wear of Jarrah and plain deal blocks, he says that a strip of Jarrah laid in

Lillie Road, Fulham, after three years and a half wear, was $\frac{1}{2}$ in., $\frac{3}{4}$ in. and 1 in. above the plain deal blocks adjoining. He also refers to another experiment made in King's Road, Chelsea, with Karri and Jarrah laid side by side, adjoining yellow deal. After four and a half years' wear the Karri was quarter of an inch above the Jarrah, and the Jarrah three-quarters of an inch above the deal. Mr. Norrington says that Karri is cheaper and generally superior to Jarrah, but the fact that Lloyd's class both woods as nearly equal to teak is strongly in favour of both materials. Both woods possess a natural oil, which is probably equivalent in its action to the creosote forced into deal blocks. In reference to the complaint that hardwood roadways are more slippery than deal, Mr. Norrington says that as it is admitted that hardwood is cleaner, and as slipperiness is generally the result of dirt, proper scavenging should obviate the complaint. But Mr.

built of local stone with brick dressings, and the internal fittings will be of pitch pine. The work is being carried out by Messrs. J. Symons and Son, of Blackwater, from the designs of Mr. J. Hicks, Architect, Redruth.

For the past year or two the Corporation of Halifax has been endeavouring to improve the sewage system of the town, which at present is admittedly unsatisfactory. The scheme that has received favour with most of the people of the town itself is one that provides for the purchase of 19 acres of land on which the sewage may be dealt with by a plan of chemical precipitation—the estimated cost being between £20,000 and £22,000. The proposal includes the introduction of a chemical precipitating process at Salterhebble at a cost of £13,000—for which powers are said to have been actually obtained—and the provision of upwards of ten acres of additional land, together with works for the treatment of the sewage effluent, this second item being expected to absorb £9,000, making £22,000 in all. The Corporation's idea has been to provide settling tanks, to have the sewage treated by one or other of the chemical processes usually resorted to, and to afterwards allow it to flow into precipitating tanks, and thence into the stream, believing that by this process an innocuous effluent would be procured.

THIS quantity of land the authorities thought was ample, and in their opinion they could procure upon it a fluid fit to enter the river after a chemical treatment by ferozone polarite, aluminiferous, charine, or the ordinary filtration system, which is the simple filtration through a filter-bed coated with carbon. In the belief that the Local Government Board would take no exception to the scheme—which includes an area of ten acres more than was originally thought of—application was made to that authority in the usual way for powers to borrow the money required to carry out the work. To this the Local Government Board have replied that the loans acquired for such purposes must be deferred pending the reconsideration by the Council of the arrangements for the disposal of the Borough sewage. What the Local Government Board wish the Corporation to do is to procure more land, so that the sewage, after

passing through settling and precipitating tanks, may be further purified through its passing overland again before being allowed to enter the stream. They are understood to be of opinion that the scheme at present proposed by the Corporation is not sufficient to warrant due purification, and practically suggest a sewage or irrigation farm. To carry out such a scheme the Corporation would, it is said, require about fifty acres of land.

THE Society for Promoting the Enlargement, Building, and Repairing of Churches and Chapels held its monthly meeting at 7, Dean's Yard, Westminster Abbey. Grants of money were made in aid of the following objects:—Building new Churches at North St. Pancras All Hallows, Middlesex, £400; Nottingham St. Catharine, £120; and Penygraig St. Barnabas, in the parish of Llwynypia, Glamorgan, £120, and towards enlarging or otherwise improving the accommodation in the Church at Molash St. Peter, near Canterbury, £15, and South Croxton St. John



THE CENTRAL HALL OF THE NEW GALLERY:
E. R. ROBSON, ARCHITECT.

Norrington says that to overcome this tendency the blocks could be laid close-jointed and diagonally across a road.

At Liskeard, Cornwall, on Tuesday, the Foundation-stone of the New Cottage Hospital, which is being erected at Tremedden, on the outskirts of the town, was laid. The site is situated on high ground adjoining the main road from Liskeard to St. Neot. When completed the building will comprise an administrative block in the centre, and wings on the right and left. The East Wing will contain a Ward for three men, and the West Wing for three women, besides an Accident Ward. There will be in addition two smaller Wards, intended, when not otherwise used, for private patients. A feature of the building will be the provision in the centre block of three bedrooms and sitting-rooms, which will be occupied as a house for parish nurses in the Liskeard district. All the sanitary, warming, and lighting arrangements will be of the latest type. The walls are being

the Baptist, near Leicester, £20. Grants were also made from the Mission Buildings Fund towards building Mission Churches at Marsh Green St. Andrew, in the Parish of Rockbeare, near Exeter, £20, and Pontymoile, in the parish of Pantég, Monmouth, £30. The following grants were also paid for works completed:—Roath St. Saviour, Cardiff, £50, balance of a grant of £200; Morley St. Paul, near Leeds, £40; Stetchworth St. Peter, near Newmarket, £20, on account of a grant of £40; Strumpshaw St. Peter, near Norwich, £15, on account of a grant of £20; and Chester St. Oswald, £30. In addition to this the sum of £449 was paid towards the repairs of 17 Churches.

PLANS for the sixth County Asylum in London are being prepared by Mr. Hine, the Architect of the Asylums' Committee, but before they can be adopted and the work begun they must be accepted by the Commissioners of Lunacy and the Home Secretary. The process of passing through plans occupies, as a rule, from six months to a year. The site for the new Asylum is at Bexley, and has been acquired. The land is at present occupied by Mr. Maxim, who lives at the old Mansion House called The Balwyns, and has a track for his flying machine laid down in the grounds. Mr. Maxim will have to remove his "plant."

THE Memorial Throne erected in Norwich Cathedral to the memory of Bishop Pelham, and unveiled by the Prince of Wales, consists of a desk or front richly carved, with three 14th century crocketed arches with elaborately treated finials. The sides of the desk are filled with sunk and moulded tracery, and with foliated panels and spandrels. The edges of the upper portions of the desk are enriched with elaborately carved pateræ, no two of which are alike. The Throne itself is a very substantial and spacious oak seat surmounted by an elaborate canopy which rises to a height of 23ft. In a niche on the western side of the Throne will be placed a figure of the late Bishop Pelham, and in a corresponding recess on the eastern side an effigy representing the first Bishop of the See, Herbert de Losinga. On the north face of the back panel is a shield, bearing the arms of Bishop Pelham, impaling those of the See of Norwich, surmounted by a mitre, and encircled by a band, on which are carved the words "In memory of John Thomas Pelham, 1857-93." The whole is enclosed in a quatrefoil embellishment, in which the rose, shamrock, and thistle are unostentatiously introduced. On the eastern and western faces are shields with the arms of the See and the Dean and Chapter of Norwich.

THE new National Schools at Hunslet, said to be one of the finest elementary Schools in Leeds, were opened by Viscount Cross, on Wednesday afternoon last. The site is adjacent to Hunslet Parish Church. The cost has been about £8,000 and the accom-

modation is for 1,180 scholars. At each end an easy stone staircase leads to the two upper floors and the numerous Cloak and Class Rooms. The Infant Department, which accommodates 400 children, is on the ground floor, consists of a large Hall, 83 feet by 30 feet and 16 feet high, with Class Rooms adjoining. The two upper floors are for boys and girls respectively, accommodating 780 children altogether, and the dimensions are much the same, though the top floor is loftier. The warming and other arrangements are of the latest character, and spacious gravelled playgrounds surround the building for each department. Mr. J. E. Leake, of Leeds, is the Architect, and the contractors were Messrs. Oakes and Son.

THE energetic Central Committee of the Paris Universal Exhibition of 1900 is determined that the great show shall "beat the record." The series of colossal buildings in lath and canvas, or in more solid materials, which busy inventors have suggested to the jury, contains some imaginative reproductions of the past. Such, for instance, are

of the sage, so intimately associated with his life and work, shall henceforth be preserved in the name of the public. Considerable repairs on the property are necessary, and the proposal is to put these in hand without delay. The sum subscribed towards the fund amounts to over £2,000, and unless this is supplemented the house will have to be absolutely self-supporting.

THE site of the new Glasgow Samaritan Hospital consists of an isolated piece of ground extending to about three-fourths of an acre, exactly to the south of the Victoria Baths, and has a southern frontage towards Coplawhill Road. The building when completed will consist of two distinct blocks—the Hospital and Administrative—connected by Corridors. The Hospital block will consist of two floors, each containing four wards, accommodation being thus provided for 28 patients. The Administrative block will consist of three floors. The Out-houses consist of the Mortuary, Post-mortem Rooms, Wash-house, Laundry, &c. The estimated cost of the building is £8,000. The Architects are Messrs. M'Whannel & Rogerson, West Regent Street.

THE Sussex Archaeological Society proposes to visit Eastbourne on July 25th and 26th. At a meeting of the Eastbourne Town Council Alderman Farncombe suggested that on the first day the members should visit Westham Church, Pevensey Castle, and Pevensey Church, and Hurstmonceux Castle and Church. On the second day they might visit the Manor House grounds and see the Cornish Cross, which many people in Eastbourne had never seen, the Parish Church and the interesting fish-markings recently discovered on the pillars, and two or three other buildings in the Old Town. They might then go on to East-

dean, and Mr. Par-

ington would show them the ancient British urn found on the Downs. They might have some excavations made there, visit Eastdean Church, and go on to Friston, and Alfriston. He thought some such scheme would probably meet with favour from the Society.

MR. LOW, the leader of municipal reform in the United States, has just presented Columbia College, New York City, with £200,000, to be used in erecting a Library building in honour of Mr. Low's father. Two of Mr. Low's friends and brother reformers have also given large sums to Columbia. Mr. W. C. Schemmerhorn has given £60,000 to erect a Natural Science building, and Mr. F. A. Schemmerhorn has presented the collection of books, pamphlets, and newspapers known as the Townsend Collection, together with a cheque for £5,000 to cover costs of indexing. Columbia College has 258 instructors, 1,800 students, a library of 175,000 volumes, productive funds amounting to about £2,000,000, and a yearly income, exclusive of benefactions, of £140,000.



THE CENTRAL HALL OF THE NEW GALLERY: E. R. ROBSON, ARCHITECT.

the Acropolis of Athens in the great age of ancient Greece; the great Pyramids of Egypt, and a Sphinx; the Hanging Gardens of Semeramis; the facsimile of the Colosseum of Rome, with actual fights of wild beasts; a banquet of Sardanapalus, with a splendid Oriental Theatre and Public Baths, exactly as at the period of that gorgeous spendthrift; the Palace of Tamerlane at Samarcand. Other suggestions depart from all ground of history, and propose to charm the visitors to Paris with sheer fantastic creations. Such is a Castle in the Air; and a zealous palæontologist proposes a reproduction of the "World before the Flood." A genius recommended a "construction of the New Jerusalem, after the model described in the Apocalypse, with its walls, towers, and gates." Another recommended "the discovery of the North Pole." This does not nearly exhaust the catalogue.

WE are pleased to learn that the Committee at the head of the movement for acquiring Carlyle's House in Chelsea as a memorial of him has now completed the purchase. It is definitely settled, therefore, that the old home

NOTICE.

Our Issue of

JUNE 11th, 1895.

Will mark the Second Great Development of

The Builders' Journal,

Which now possesses a

Larger Circulation

Than any other Architectural Journal published in this country. This

SPECIAL ISSUE

Will have the whole of its pages Printed on White Paper, and possess a

COVER

Of Stiff Green Paper, which is now being manufactured by an English Maker. We have invited three of the best known Pen and Ink Artists to submit us designs for a New Head Piece, which will embellish the issue. This Number will be sent by Post to Every Architect, Surveyor, Borough, Diocesan and Ecclesiastical Surveyor, Clerk to Local Board, in England, Ireland, Scotland and Wales. This, with the Publisher's ordinary Edition, will make the output close upon

25,000 Copies.

A FRENCH VIEW OF LONDON.

M. ALPHONSE DAUDET has been speaking his mind pretty freely about London and Londoners. What strikes him most forcibly in our Metropolis is the silence. This seems odd at first, but M. Daudet draws a distinction between sound and noise. The sea, he says, is silent in spite of its monotonous roar. In London the silence is disquieting, "for millions of taciturn automata seem passing on a stage in a dream, on an india-rubber floor." That is an extremely picturesque description of the movement of London from a Parisian's point of view. M. Daudet is deeply impressed by the size of everything, especially by the Tower Bridge, "that mass of timber and iron slowly and fearfully parting, and then falling back and resuming its original place." But mere size is not enough for the artist. The lavish ugliness of London distresses our visitor. He sees "an extreme senseless abundance." The monuments strike him as terrible, and that is not to be wondered at, for the Englishmen with any idea of Art and proportion is perpetually afflicted by the London statues. "You have a sensation," says M. Daudet in his vivid way, "of an immense box of stupendous toys scattered pell-mell over a place. Look, there are one tower, two towers, ten towers, and still more and more, and pedestals and statues, and palaces and colonnades, and cupolas and belfries, and never big enough, never lofty enough, never imposing enough." And then comes the inevitable contrast. "Paris seems to me like a pearl, very delicate and artistic. I think of the harmonious entirety of its quays, the fine proportions of the Louvre, of the beginning of the Champs Elysées. Oh, you do not find that sensation here." You do not—we admit it with pain. But M. Daudet is learning to like us, in spite of our unconscionable belfries. He says frankly that he came to London with a detestation of the English race. "But now, in spite of the horrible cookery of coarse meat, in spite of the tea, to which I cannot get accustomed, I am beginning to be won over. One thing particularly strikes me, the cordiality of the people for France, as evinced in the letters I receive, and the attentions without any parade which are paid me wherever I go."

The Builders' Journal.

MEN WHO BUILD.

No. 14.

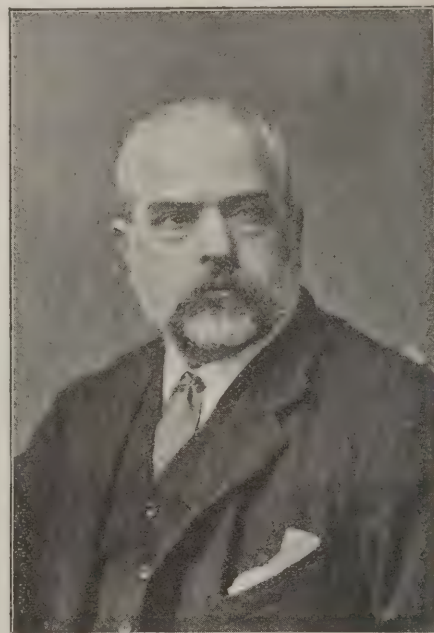
MR. E. R. ROBSON, F.S.A.



It is a grand achievement for a man, particularly an Architect, to pin his faith to one particular style or period, and to work in it continuously against all odds. Before the London

School Board started on its glorious work, and before Mr. Robson publicly took hold of the reins of School planning, nothing in Architecture was so wretchedly imperfect as that of Scholastic Design. A School looked anything, between a four storied warehouse and a Gothic Temple. Its plan mirrored the whims of its particular Architect, it had few set rules, and fewer regulations. Mr. Robson, himself, developed School Architecture. Hundreds of Schools, worked from the same details, grew up all over the Metropolis. Country Architects, with the instincts peculiar to their race, soon absorbed the planning and the Architectural treatment of the Board Schools, so that in less than five-and-twenty years, a distinct method of School planning and design has spread itself over the whole country, and the source of all this inspiration is the subject of this sketch. When E. R. Robson resigned his position at the School Board, to be followed by Thomas Bailey, his chief assistant who has already figured in this series of "Men who Build," he merely resigned to accept the more responsible and less harassing appointment of Architect to the Board of Education, so that in the multitudinous drawings which are referred to his department, he can witness the outcome of his own initiative. There is now a uniformity and similarity of plan and elevation of Schools throughout England, that would be troublesome to the student of Architecture were it not so strikingly apparent: and it will not be forgotten that in very many districts of London and other great towns, and even in our smaller cities, the Schools are the only buildings which possess the slightest Architectural merits.

There was nothing material in the early training of E. R. Robson that prompted him to select this particular department of his Profession, except that, unlike most young men, he preferred to study, to measure, and to sketch the planning of buildings, even before a pretty "bit," or a grotesque, captured his eye. And Professionalism could do with a little more of the same faculty now. This propensity of his followed him over his sketching tours on the Continent, and when he finally fixed upon practice, he had an amount of practical experience and



data at his finger ends, which became of inestimable value to him later. Mr. Robson has, of course, "passed through" many good offices in his early days, but not until a couple of years after he had assumed the Architectural destinies of the London School Board, was it apparent that a master of School planning had arrived. The development of his ideas is known throughout the World, for England possesses Scholastic Architecture worked upon scientific and practical lines, unequalled by any

other European country; and its Technical School buildings are fast following suit. The fact that Mr. Robson's successor at the School Board has continued the "Architecture" of his predecessor, merely placing upon it his own individuality, makes the elevations of London Schools as a whole still more striking: for the uniformity of style has been, under the wisdom of the Board, so judiciously adhered to.

Mr. Robson, in both his official positions, has possessed the privilege of private practice. His Institute of Painters in Water-Colours, in Piccadilly, is by many good judges considered to be one of the best elevations in London; but how sadly marred by the wretched placards of Commercialism and the



THE TERRACE FRONT OF TROTTER'S CLIFF, SIR SYDNEY WATERLOW'S HOUSE, BY E. R. ROBSON.

individualities of shopkeepers! The sculpture over the entrance, is a delicate piece of work and worthy the position assigned to it in the pages of this issue. But as far as London is concerned, Mr. Robson may rest his reputation upon the People's Palace, which, although yet incomplete, is undoubtedly the finest work of its kind in the country. We have seen happier phases of Mr. Robson's talent than the Front of the People's Palace, but in critically dealing with a work of this kind—which we have no notion of doing here—it should always be remembered that Architects are invariably debarred the privilege—which is granted to every other Art and Profession under the sun—of initiating work from their own souls, unhampered by the desires and ideas of cranky clients. We have no knowledge that such was the case with the People's Palace, but it may have been so.

Mr. Robson is a man of action and resource. The story of the New Gallery proves it. When the proprietors were "removed" from the Grosvenor Galleries, they found themselves without a habitation, until Mr. Philip Webb—than whom there is no more delightful man and architect living—sent them to Mr. Robson for succour. They wanted a good site for their Gallery, and Mr. Robson advised the Old Market in Regent Street. It was not considered suitable, and the Architect's advice not being accepted he naturally withdrew. But some days after the proprietors returned to Mr. Robson determined to withdraw their objection to the Regent Street project if he could transform the building into Art Galleries in three months. Considering that a rod had not even been passed over the site, this demand was startling, but after all a bagatelle to a man of grit. Within an hour of the receipt of his instructions, Mr. Robson visited the works of Messrs. Farmer and Brindley, hunting for marble. The firm, fortunately, had just received a big consignment from the Italian Quarries, and before Mr. Robson left the yard, the saws were actually at work cutting some fine blocks into slabs, and the Architect returned to survey his site and to mature his scheme. At daylight the following morning he was ready for the workmen, and in a few hours a gang had taken possession of the building and commenced operations. Within nine weeks from the day on which he first visited Farmer and Brindley's yard, the new Gallery was handed over to its proprietors.

We believe we are correct in saying that Mr. Robson has never used terra cotta as a building material. He is one of those men who do not consider it so particularly adapted to the atmospheric conditions of large towns. Mr. Halsey Ricardo's salt glazed brickwork is distinctly preferable, and he means to follow

the example when occasion serves. One cannot glance at the series of beautiful photographs of Sir Sidney Waterlow's fine house in Surrey, without discovering Mr. Robson's leaning to Italian influences. The Portè Cochère of Trotters Cliff is as fine a piece of modern design as we have seen, and there is a stately charm about the Terrace Front, which transcends above the picturesqueness of much of the so called Queen Anne stuff which irresponsible Architects are guilty of. The two turrets were not in Mr. Robson's original drawings, but were constructed on the express demands of the owner. With those who consider the Classical is the right feeling to introduce into English homes the Hall of Sir Sydney Waterlow's house will find much favour.



HALL OF TROTTER'S CLIFF HOUSE, SURREY, FOR SIR SYDNEY WATERLOW:
E. R. ROBSON, ARCHITECT.

Mr. Robson is one of the few men in the Profession who have a grip of matters beyond the elements of design. It were necessary, or he would not occupy his official position at the Board of Education. It is easy to imagine the number of scholastic schemes which comes under his personal notice, and the reports he makes personally upon them all. It has naturally, in the experience of years, become somewhat of routine this reporting upon the planning of schools, and it may be explanative of how he can get through a week's work in a day. In his fine suite of rooms opposite Barry's crowning work at Westminster, Mr. Robson exerts his private influence on Architectural design; but the great point of his life lies between the Thames Embankment and Whitehall. If he did no other stroke of

actual work, but rested, in the prime of life, on the laurels which we gladly offer him, he would have accomplished a noble record given indeed, to but few modern Architects to accomplish.

EXTENSIVE additions are now being made to St. Paul's Schools, Walkden, the Earl of Ellesmere having agreed to defray the cost, £1,200. Additional accommodation will be gained for nearly 200 children.

MR. G. F. WATTS, R.A., has given the Home Arts and Industries Association a cheque for 1,000 guineas towards the endowment fund which he and Mrs. Watts are raising, and which is needed to place the Association in a sound position. The Annual Exhibition of the Association will be held on June 13th, at the Royal Albert Hall.

THE idea of holding an International Exhibition at Montreal next year, is likely to fall through on account of the refusal of the Dominion Government to grant the desired sum of 250,000 dols. in aid of the project.

At a sale which took place recently at Glangwina, the residence of Mr. W. H. Graves (Lord-Lieutenant of Carnarvonshire), an old and very dirty picture was bought for £5 by a gentleman, who sent it to Christie's in order to ascertain if it was of any value. The painting is believed to be a missing Rubens, and is roughly valued at £7,000.

THE Society of St. Nicholas' College, is about to open another great School at Worksop, in connection with its Midland branch, of which the headquarters are at Denstone, to be called St. Cuthbert's College. The buildings, which will be sufficient for an instalment of 200 boarders, include a Great Hall, 116 ft. in length, Libraries, Class-Rooms, Masters' Rooms, Provost's Lodgings, Dormitories, and extensive Offices for servants, &c., and have cost £18,400. Another Wing, which will contain a temporary Chapel, has been commenced, and the whole blockforms an imposing feature amidst the beautiful forest scenery of the Dukeries in which it stands.

THE foundation stone of the new buildings at Deptford Foreign Cattle Market will be laid on the 14th of next month.

THE amount of the accepted tender of Garton & King, Exeter, for works for Exmouth Water Company, is £1,582 3s. 4d.

MESSRS. WALSH & WRIGLEY, Architects, Hebden Bridge, have been instructed to prepare plans for a Catholic Church at that place for 400 persons, with Presbytery adjoining.

GREAT progress is being made with the St. John's Church Tower, Bognor. In fact the lofty structure will soon be completed, and, towering far above the Water Tower and other prominent buildings, will form a landmark for that part of the Sussex coast.

A NOVEL Art Exhibition will be opened shortly at Messrs. Dickinson & Foster's Galleries in New Bond Street. It will consist of pictures, prints, &c., relating to Dorset, and illustrating "Wessex," and more especially the towns, villages, and scenes described in Mr. Thomas Hardy's novels.

ANGLO-SAXON ARCHITECTURE.

PROFESSOR G. BALDWIN BROWN AT THE R.I.B.A.

A PAPER was read by Prof. G. Baldwin Brown at the Meeting of the R.I.B.A., on the 20th inst., on "Some Characteristics of Pre-Conquest Architecture." The lecturer said that a century ago the word "Saxon" was commonly applied in a loose sense to denote all round-arched Mediæval structures, including those of Norman origin. In Rickman's "Studies of the Styles of English Architecture," the Norman was made the first of the styles there described and discriminated. Appearing as it did in the Architectural history of the country, between the Roman and the Norman periods, Saxon work might seem at first sight very easy of identification. Roman work, it might be said, and Norman work were alike unmistakable; but in small and unpretending structures the Norman style showed itself still uncertain and tentative. At Bernay, in Normandy, in the first half of the eleventh century, and in Edward the Confessor's buildings at Westminster, the masonry and details had the pronounced Norman character; while country Churches in Normandy contemporary with Bernay, and those erected in Britain in the first generation after the Conquest, were often built irregularly of small materials, and were destitute of those special constructive and ornamental features by which the style was generally recognised. A certain air of simple and severe massiveness, while the use of blocks of abnormal size lent to the structure a certain megalithic aspect, was a trait to some extent Roman, but was opposed to Norman practice. Though at times elaborate, the enrichment seemed to bring before us craftsmen working, not according to a living tradition of style, but from imperfect remembrance or hearsay. We might describe pre-Conquest Architecture as presenting a decidedly primitive aspect. In regard to its facing, Saxon masonry had no special consistent character. Masonry of stones, squared and laid in level courses, was very characteristic of Saxon work of the better kind, and was well represented at Bosham, near Chichester, and Billingham, county Durham. The external use of plaster was proved in many cases by the setting back of the wall-face half-an-inch behind the quoins. The absence of buttresses was a noteworthy feature of Saxon as distinct from Norman walling; but the chief peculiarity was to be found in the quoining. There was an important difference in the structure of the wall between the work of the Romans and the Normans. The Saxon wall was a single thing, the Roman and the Norman wall, at any rate in the twelfth century, a threefold affair, consisting of two carefully-constructed outer faces and an interior filling of rougher material. The Norman wall was generally thicker than the Saxon, and it was to the credit of Saxon builders that their comparatively thin walls, often less than 3 ft. in thickness, had stood as well as has been the case. The Saxon column was but a prop, with nothing organic about it. It was a defect in Rickman's and other works that they dwelt too much on the classification of details. Referring to the Saxon Towers, he suggested that they were partly built as strongholds against the Danes, a purpose which they would fairly answer in a constructive sense. Referring to some of the most complete examples of Saxon Churches, at Escomb and Bradford-on-Avon, and St. Mary's, Dover Castle, he observed that each of these testified to the existence of a stone Church on the site before the Conquest, and these survivals were proof that permanent Churches existed on the present sites before the Norman epoch. It was true that many of the earlier Churches were of wood, one solitary example of which material yet existed at Greenstead, near Ongar, Essex; but from the Venerable Bede we learned that Churches were at all periods constructed of stone as well as of wood. A single Saxon quoin possessed rich historical associations to the student of Architecture. The Lecturer proceeded to urge the importance of the consideration of the direction of roads and sites of early buildings in the study of history, pointing out that the rural green was the oldest symbol of English life. There seemed to be two periods of pre-Norman

Church-building, the Romano-British period of the conversion of the Saxons to Christianity, and the rebuildings by Canute in the early part of the eleventh century. Apart from the remains recently found at Silchester, the only existing Church of the Romano-British period was the little one of St. Pancras at Canterbury, which was very different in style to the work at, say, Brixworth, or St. Mary's, Dover. The Saxon builders frequently utilised Roman materials, as in these cases. There was a marked contrast between the pre-Conquest buildings in Kent and Sussex and those in the north of England. The Churches of Monkwearmouth and Jarrow, the latter now demolished, at Escomb, near Bishop Auckland, and at Stow, Lincolnshire, and the Chapel of St. Lawrence, at Bradford-on-Avon, were all, he believed, buildings of the seventh and eighth centuries. The Church of St. Mary, at Dover Castle, was of a totally different class; it was a well-developed Church with a Central Tower; it was certainly not a reproduction of a Roman basilica, but was based upon a Roman Mortuary Chapel. The buildings of Monkwearmouth, Jarrow, and Bradford-on-Avon were entirely different from this Castle Chapel; they followed the Celtic traditions directly derived from the Stone Architecture of Ireland. The chief characteristics of this Celtic type of Church were height and narrowness, the plan having a narrow aisleless Nave and a square-ended Chancel agreeing with the normal Celtic arrangement. The sloping jambs of doors and windows, and the use of large stones might be equally paralleled in Ireland. In Saxon work these features were always carried out in squared and coursed masonry, whereas in Ireland they were always of rough native stone. In Kent, where the Roman influence and tradition were much greater, the Churches were Apisidal; but throughout England Celtic traditions prevailed.

In the discussion which followed Mr. W. White, F.S.A., said that he thought that the paper read treated more upon a historical than a practical subject, and that he should like the Professor's learning brought to bear upon the history of the discoveries recently made at Durham Cathedral. Mr. R. Phené Spiers and Mr. Rickman also took part in the discussion.

PROFESSIONAL PARAGRAPHS.

ON Tuesday a meeting of the Stewartry Road Board was held at Castle-Douglas to consider a report on Kirkcudbright Bridge by Messrs. Strain, Robertson & Thomson, Glasgow. The Bridge was erected in 1868 at an expenditure of £10,000, and its present insecure condition is due to the recent severe weather.

FROM designs by Mr. Walter G. Doolan, M.A., of Dublin, a Roman Catholic Church of St. Mary is about to be built at New Ross. The contract has been taken at £16,000, by Mr. A. Cullen, of New Ross.

THE plans prepared by Mr. J. W. Tennant (Tennant & Bagley), the recently appointed Architect to the Pontefract Joint Hospital Board, which he has prepared of a new Infectious Diseases Hospital, at an estimated cost of £4,800, have been sent to the Local Government Board for approval.

THE Exminster Church Restoration Committee has resolved that Messrs. Rowell, the Architects, issue specifications and solicit tenders from a selected number of contractors with a view to the restoration of the roof on similar lines as at present existing. Tenders will also be invited for reslating the roof.

A NEW North Aisle has been added to St. Agnes' Church, Birch, which is situated in Slade Lane, Longsight, Manchester. Additional accommodation is obtained for 200 persons. The Aisle is divided from the Nave by an arcade of four arches, and is terminated at the West end by a semi-circular Apse. On the North side are four large equal gables, the windows in which give light and air and add to the picturesqueness of the building. The work has been built by Mr. Thos. Scott, from designs by and under the superintendence of Mr. Medland Taylor, F.R.I.B.A., of Manchester. The cost has been £1,400.

NEW Roman Catholic Schools for St. Andrew's parish are about to be built in Great Brunswick Street, Dublin on the site of Sibthorpe's marble works. The buildings will cost £5,200. Mr. William Hague, Dawson Street, Dublin, is the Architect, and Messrs. Michael Meade and Son, Great Brunswick Street, in the same city, are the contractors.

A VICARAGE is about to be built for the Incumbent of the Parish of S. Mathew, Blackburn, a house of residence not being included in the scheme of Church building in the erection of the edifice in 1886. The Vicarage, which occupies a site next the Church, is being built from designs by Mr. James Birtwistle, Architect, of Blackburn.

THE new Altar and fittings in the Side Chapel of St. Dunstan's, Earle Road, Liverpool, were recently dedicated. The Chapel presents a very pleasing appearance, the rich hangings and ornaments harmonising with the rest of this beautiful Church, the whole work being from the designs of Mr. C. E. Deacon, the Architect of the Church.

THE new bank building at Horncastle, for the Lincoln and Lindsey Banking Company, Ltd., which is almost complete, is in the Late Gothic style, and has been designed by Mr. William Scorer, Architect, Lincoln. Mr. Frank Bell and Mr. George Pike (both of Horncastle) being the builders. The carving, both wood and stone, has been intrusted to Messrs. M. Tuttell and Son, Architectural sculptors, Lincoln.

MR. PAUL SPEAKE, Chairman of the New Offices Committee of the Queensbury Urban District Council, has laid the memorial stone of new Council Offices, which are to be erected in Albert Road, from plans by Mr. J. Drake, Architect, of Queensbury, Bradford, and which will cost £2,500. The building will comprise Clerks, Surveyors, and Rate Collectors' Offices, and a large Council Room, also a Fire Brigade Station and Mortuary.

A NEW Infants' School has been added to the School Buildings of St. Luke's Parish, Beeston Hill, Leeds. By this extension extra accommodation has been gained for 250 children. There are four Class Rooms, a small Hall, and Cloak Rooms. Advantage has been taken of a fall in the site to build a large Room, which will be fitted up as a Gymnasium. The cost has been £1,500. The Architect is Mr. W. S. Braithwaite, of Leeds.

THE Speyside Distillery Company has just accepted contracts for the erection of a new Distillery at Kingussie, on ground acquired from Mr. Baillie of Dochfour immediately behind Pullar's Hotel. The works promise to be about the largest and most complete in the North. It is proposed to have the building lighted by electricity. The estimated total cost is given at from £15,000 to £20,000. Mr. Alex. Mackenzie, C.E., Architect, Kingussie, is designer of the works.

ST. JAMES'S Church, Morpeth, an edifice built fifty years ago, has been greatly improved by the removal of the original plain Chancel pews and the introduction of Choir-stalls. They have been made by Messrs. Sopwith & Co., Newcastle, from designs by Messrs. Boulds & Hardy, Architects, Morpeth. The material used is wainscot oak, and the style adopted is an adaptation of Norman zigzag; billet, nail-head, pellet, and lozenge-shaped mouldings, and conventional carvings are employed in all the stalls; those for the priests are distinguished by having their ends further enriched with wood-carving.

MEMORIAL stones of a new Wesleyan Church at Middleton, near Leeds, have been laid. The new Church will be built entirely of brick and terra cotta, and in the English Renaissance style of Architecture; having accommodation for 364 persons including 50 in the Gallery. The plan also comprises a Minister's Vestry, and also a large Vestry to accommodate 40 people. The total length of the Church will be 67 feet, and the breadth 40 feet. The Architects are Messrs. T. and C. B. Howdill, A.R.I.B.A., of Leeds, and the contractors are—for brick-work and joinery, Mr. Jos. Pullan, Leeds; plumber, H. Lumley; slater, J. Season; plasterer, Mr. Branton; ironwork, Messrs. Beckwith; painters, Messrs. Roylance and Horsman; heating engineer, Mr. George Tankard. The total cost will be £1,800.

SECRETS OF PICTURE MAKING.

MR. SEYMOUR LUCAS, A.R.A., ON THE AVERAGE CULTURED PERSON.

MANY people, so Mr. Seymour Lucas appears to think, might become fairly good Art critics, if they would only add to a certain amount of culture and natural taste, a little knowledge of the technicalities of Painting. In his lecture on "Picture Making," at the Royal Institution, the painter paid a distinct compliment to the average cultured person. This is the sort of material, so we gather, out of which critics ought to be compounded. What is chiefly lacking is technical knowledge. The average person generally appreciates a good picture when he sees it, but press him as to how much of the combined effect is due to correct grouping, harmony in composition, chiaroscuro, and the rest of it, and he can only flounder in the vaguest of generalities. Mr. Seymour Lucas would mend these defects, and hence the discourses which he is giving to the Royal Institution habitués, most

Rembrandt, Turner, and other great men. Roughly speaking, the rule is that one-third of the picture must be dark, and the other two-thirds light, or *vice versa* (it does not matter), and if this proportion is preserved it is equally unimportant what position the dark space occupies, whether as a band at the bottom, as in a Dutch landscape or sea picture, or running diagonally across one corner or at an end. The half-tones are confined to the light two-thirds. Mr. Lucas said nothing was more difficult to paint than a broad mass of sky; hence in modern pictures the sky-line was kept high. Not so the old Dutchman, who revelled in a low horizon and a vast sky. In this particular also was Turner's supremacy. Painters of Interiors reserve their one-third light for their figures. Touching on the question of "breadth," the lecturer illustrated the sort of difficulty to be contended against by throwing on the screen a photograph of his own picture in which the Earl of Leicester is seen emerging from a doorway, and a number of courtiers are awaiting him outside. The two

PROFESSIONAL PARAGRAPHS.

THE School Board for Newcastle-on-Tyne, has appointed Mr. W. Lister Newcombe Architect for a new School to be built at South Byker.

THE memorial stone of St. Margaret's Established Church at Barnhill has been laid. Mr. Carmichael, London, is the Architect of the building.

TENDERS have been accepted for the building of the Wake Memorial Church at Sunnyside, where a site was secured some months ago. The cost of structure will be about £4,000. The edifice is being erected by subscriptions in memory of the late Vicar.

MR. J. JACKSON, Barry Street, Leeds, is the Architect for the new Baptist Chapel, at Heaton, Yorks. A Lecture Hall and Class Room will be obtained under the Chapel. The cost will be £3,377. The builders are Mr. Patefield, mason; Messrs. Foster and Fortune, joiners.



A LONDON SCHOOL: BY E. R. ROBSON, F.S.A.

of whom are probably also consistent "private viewers." The present lecture was devoted to the general principles of Picture-making, and was illustrated very aptly with lantern slide reproductions of many well-known canvases in the National Gallery. Mr. Lucas mainly dealt upon the qualities of colour, breadth, and chiaroscuro. It is possible, he thinks, to teach a good deal of all three by rule of Science as Sir Joshua Reynolds contended. But after all a good colourist is born, not made. Colour is the most personal element in a painting; every artist has his own scheme of colour, much as he may try to follow other masters to unlock their secret. Mr. Lucas himself, went to Spain to get hold of the colour methods of Velasquez, but when he came back and commenced to use his knowledge, he still found that the colour was Seymour Lucas and not Velasquez. Speaking of the management of light and shadow, and the secret of getting "breadth" into a picture, the lecturer exhibited a number of diagrams to illustrate the scheme adopted by

main figures take most of the bright light, but as originally painted they were somewhat isolated, and the effect proved weak. Mr. Lucas took the advice of a brother artist, who recommended that the pavement (originally dark) connecting the two figures should be painted as white marble. By this means the points of high light in the picture were made continuous, and the effect was at once to give the necessary "breadth." The point was also emphasised by reference to a number of Turner's finest landscapes. In conclusion, the lecturer dealt with the important point of subordination of detail, remarking that the Dutch Masters, who carried detail further than any other School, reserved their finest brushwork for the most distant parts of the scene.

THE colossal bronze Statue of the late Marshal MacMahon, which is destined to adorn the Market Square of Magenta, was successfully cast a few days ago at Pricotta, near Milan.

As a memorial of the late Father Healy, a small Hospital is about to be built in Dargle Road, Dublin. Mr. Albert E. Murray, of Dawson Street, Dublin, is the Architect, and the contractor is Mr. Kiernan, of Talbot Street, Dublin.

TEN designs were submitted in the Leek Markets Competition about the middle of March, and on Tuesday last the Urban District Council accepted their committee's recommendation to premiate the following:—1, Mr. O. T. Brealey ("4d. Stamp"); 2, Messrs. W. Sugden & Son, F.R.I.B.A., and Messrs. Mosley & Anderson ("Bon Marché"); 3, Messrs. Baynes & Campbell ("Auld Lang Syne"). Mr. John Brealey, the Chairman of the Urban District Council, presided at this meeting. Messrs. Sugden had memorialised the Council to appoint a professional assessor to adjudicate upon the various designs sent in. This was negatived, though supported by a strong body upon the Council and by the local press.

ARCHITECTURE AND DESIGN.

MR. WALTER CRANE AT THE A.A.

[In view of the importance of Mr. Crane's Paper, we print a page this week, and shall give a further instalment in our next Issue.]

THE large attendance of members at the A.A. meeting of the Session, at 9, Conduit Street, on Friday evening, was undoubtedly due to Mr. Walter Crane, who came provided with a Paper admirably prepared and careful in detail, headed "The Influence of Architectural Style upon Design," a subject with which, perhaps, no one else is quite so competent to deal. The Author was surrounded by a large number of sketches, which were so perfectly executed, that the Chairman (Mr. E. W. Mountford), at the close of the meeting, requested the loan of them at some future period on behalf of the Association, a request to which Mr. Crane at once acceded, and one of which the audience expressed their heartiest approbation. Mr. Walter Crane said: It seems tolerably obvious that without shelter of some kind, without walls or roof, without suitable materials, determined limits, proportions and prepared surfaces, the art of the decorative designer, whether in Sculpture or Painting, or any other method of expression, could not have much chance of serious development, historic continuity, or permanent existence. The natural walls of cliffs and caves might be utilised, certainly, as they have been in pre-historic times; bold tribal ensigns such as the "White Horse," cut through the green turf on the chalk in a kind of natural squaffito, as it appears upon the Wiltshire Down, might exist (with periodic scouring) for ages, but it is only with the development of the Constructive Art that the organic ornament springs to life; only with the squaring and joining of timbers, the moulding of bricks and tiles, and the cutting and dressing of stone, and their use under the constructive necessities of a building that the sense of relation or proportion is born, without which we could have no Fine Art at all.

It may be an open question whether the impressionist individual graphic sketcher or the constructive associated craftsman designer represented the primitive artistic condition—we are apt to colour history as well as Art by the tint of our own sympathies—but, judging from the fragmentary squaffiti of the cave-men it would at most seem as if the former was the first in the field, and that man only slowly found his way to the harmonious, related, and ornamental forms of Art after he had made some progress in the constitution of the primitivedwelling.

It seems highly probable that the material and method of construction of the wicker and wattled walls of the primitive hut gave motives for some of the first types of pattern design.

The primitive hunter-artist might scratch the forms of the reindeer and mammoth upon the bone handles of his weapons, or the herdsman-astronomer cut the signs of the sun and moon, of fire and water upon clay or stone; but the sense of rhythm and harmonious recurring line would have to be learned in following the useful craft of the rush-plaiter and basket maker, to whose simple constructive methods we owe at least two important plans of ornament—the chequer and the spiral meandering line. Their value, too, has never been forgotten in ornamental work, and when man learned to work stone and bronze he still perpetuated these primitive motives.

In considering the bearing of the Architectural influence upon Decorative Design of all kinds, which is so marked in all historic Art, we may conveniently adopt Mr. Ruskin's three broad and main divisions which indicate the fundamental differences of constructive principle in Architecture, namely:—

I. The Architecture of the Lintel.

II. The Architecture of the Round Arch.

III. The Architecture of the Pointed Arch.

Or, characterising them from the decorators' point of view, by their leading ornamental spaces or features, we might distinguish them severally as:—

I. The Architecture of the Frieze and Pediment.

II. The Architecture of the Spandril and Dome.

III. The Architecture of the Vault and Window.

Of Lintel Architecture, ancient Egypt gives us the most massive examples, but it seems most probable even here stone construction only followed wood, or rather reeds and clay, and that the types and systems of ornamental were originally suggested by these primitive materials.

If we look at the primitive Egyptian house, planned for a hot climate, built by the great river-side, of materials furnished by the river itself, we may see the type of the massive Egyptian Temple column (in the clustered reeds fixed at the angles). This but represents in stone, and more formally, a bundle of lotus reeds, bound together by fillets of rushes with one bud or flower clustered at the top to form the capital. The coved casting of the flat mud-roof, made of rushes, is perpetuated in the pointed cornice of the pylons of the great Temples, as at Edfu and Philæ.

The mud wall, built in layers filled in between the frame-work with its horizontal and vertical divisions marked by them, may also have suggested the sub-division of the stone wall to receive the hieroglyphics and figure paintings, but with the adoption of stone structure came Stone Sculpture, and the Temple walls are regarded as great surfaces for the permanent record of the mysteries of religion, of the power and attributes of gods and kings, of their wars and conquests, and of the labour of the people upon which the wealth and power of empire always rest. The Egyptian wall reliefs were sunk, the outlines being hollowed and the edges of the figures rounded so that they never projected in relief beyond the surface of the wall. We may consider this an elementary stage in the evolution of Relief Sculpture, but, undoubtedly, the broad and massive monumental look of the walls which is so marked a feature of the Egyptian style owes its character to this treatment. The statues have the same simple, broad, massive Architectural character, as if they were the half-emerged spirits of the changeless stone itself. Placid of countenance and tranquil, indifferent to the passage of time, they impress us with their sublime dignity which belongs alike to their sphinxes and lions which guard the portals as to the small portrait statue. Even where these latter show an extraordinary realism as in the famous scribe of the Louvre, with the eyes of rock crystal, quartz and bronze—a work of the Early Empire—they are still under the influence of this Architectural control, simplicity and reverse which seem to me to give dignity to all Egyptian Art.

The Egyptians, though acquainted with the use of the round arch, did not use it as an Architectural feature, like the Assyrians in their palace gateways, and who also, according to Viollet le Duc, used the round brick vaults to support the roof of the interior large halls of these palaces; but the sculptor was the chief decorator in the Assyrian Palace. He kept the door with his mighty winged bulls, man-headed, meeting at the angles and facing outwards in a formidable way, their general design controlled by the rectangle of their position and Architectural purpose; and he covered the alabaster wall slabs with delicately chiselled reliefs in which the story of his times and the customs of his country are graphically, if somewhat rigidly, told.

The ancient Persian depended largely for his Architectural effects upon lintel and column. The peculiar form of the typical capital suggesting its origin in the timber-built houses of the Medes, with forked tree stems supporting the beams of the roof.

The wall decoration of glazed bricks for the ancient Fortress and Palaces of Susa, shows the Persians to have been accomplished workers in that material, and to have been early distinguished for their ornamental and colour sense. The frieze of arches moving in severe profile along the battlements of the Fortress, forms a striking decoration and at the same time a remarkable illustration of the Architectural influence, since the decoration not only shows this in its design, but could not have existed apart from the actual wall and its construction. The very joints of the bricks help the general effect and vary the surface. Design, colour and modelling are here one in structure. The figures appear to have been proved upon the clay while soft from wooden moulds, and then divided into bricks, the bricks

being long in proportion to thickness. The colour surface of the turquoise blue of the ground is very varied, being put on in small well-flattened disc-like patches. The figures are alternate as to their dress, patterns and colour, though alike in attitude. The small repeated form upon the dress of one set of archers is supposed to represent the fortunes of Susa itself in a heraldic sort of way.

In the palm leaf-like running border, as in a similar design of frequent occurrence in Assyrian ornament, we see the type afterwards developed by the Greeks in the Athenian, which must have been largely under Asiatic influence. To the Greeks, too, we owe the simplest and most refined type of Lintel Architecture in the Doric Temple, which was apparently evolved from a timber-built Shrine or Tabernacle. The triglyphs which divide the external frieze into panels representing the ends of the crossbeams. These, with the vertical grooves, serve as a framing for the Sculpture, which, as in the Parthenon, filled the metopes or spaces between them. The low pitched roof terminates in a pediment, and these pediments again afforded a space for Sculpture. In the arrangement of the groups which fitted the Eastern and Western pediments of the Parthenon, shattered as they are, with the assistance of Cowey's drawings we may detect the controlling influence of Architectural line. In fact, Figure Sculpture intended to be placed in a pediment, can only fill its position when it acknowledges this control, since the groups, however varied, must be enclosed by the rigid boundary of the space running into extremely acute angles at each end.

The subjects were the Counties (?) of Athena and Poseidon for the patronage or protection of Athens, and they were significant and symbolical of all that the Athenian citizens held dear. In the Eastern pediment we had the fragments of a great sculptured and decorative epic, the central point of the birth of Athena being lost; but in the figures and groups that remain, I think it is clear how constantly in the controlling lines both of the groups like the Fates, and in single figures like the Thesus and Misus, the long sloping angles of the pediment recur through infinite variations, and give harmony and relation to the whole work, from the extended arms of the Sun God rising in the extreme angle, driving his horses, whose heads emerge from the sea, to the descent of Selene, with the horses of night in the corresponding angle.

We find here that great principle which holds good throughout all design, the principle of recurring or re-echoing line which governs both the disposition of masses and the arrangement of detail.

We may trace the indications of the same feeling in the design of the Metopes and of the famous frieze of the Cella, which is still more decidedly ornamental in its lines, and might almost have been planned upon those of a running rythmical scroll border. There is, of course, in practice, all the difference in the World between working consciously and dryly according to fixed principles and working inventively and freely under the influence of Architectural geometric lines and spaces. To acknowledge the existence of natural laws in Art is a very different thing to being a slave to an Academic tradition, as in Art there are generally a variety of ways of solving a particular problem.

It may be said, indeed, that however beautiful these sculptures are as individual Figure-Sculpture and regarded solely as such, they are strictly Architectural ornament and parts of a whole, and their distinction of style is, I venture to think, largely owing to that fact. The truth is, that the human figure was really the ornament of the Greeks. Their types of strictly ornamental pattern, in the ordinary sense, were extremely limited, and mostly derived from Asiatic prototypes, however, refined upon and perfected by delicacy and precision of workmanship. But from the Phidian period till the decline in Figure Design, they were free and inventive, and whether the aim of their artists was to produce a terra-cotta statuette, to paint a vase, to carve a marble statue, or a frieze slab, we find the same extraordinary feeling for grace and appropriateness and sense of controlling line.

(To be continued.)

BUSINESS AT THE A.A. MEETING.

Mr. A. C. Long, The Limes, Mostyn Road, Brixton, and Mr. J. E. Colon, 1, South Bank Terrace, Surbiton, were elected members of the Association. A vote of thanks was passed to Mr. J. T. Perry, the author, for his donation of "Blethingly," to the Library. The Chairman announced that the Royal Institute of British Architects had consented to make the Association a grant of £100 for the ensuing year. The result of the election was as follows:—

President, W. D. Caröe, M.A., F.S.A.

Vice-Presidents, G. H. Fellowes-Brynae and F. T. W. Goldsmith.

Ordinary members of Committee—

E. W. Mountford..	242
A. B. Pite ..	222
F. G. F. Hooker ..	217
J. Begg ..	191
O. Fleming ..	174
W. H. Seth Smith ..	160
E. Woodthorpe ..	157
Theo. Moore ..	156
Hon. A. McGarel Hogg ..	109
A. W. Earle ..	105

Hon. Treasurer, Hampden W. Pratt.

Hon. Librarian, J. W. Stonhold.

Hon. Secs., B. F. Fletcher, A. H. Hart.

The above form the Committee.

Other officers—

Hon. Solicitor, W. H. Jamieson.

Hon. Asst. Librarians, C. H. Freeman, E. W. M. Wonnacott.

Hon. Auditors, E. H. Sim, F. G. W. Buss.

Asst. Sec. and Registrar, D. G. Driver.

VOTES OF THANKS.

Votes of thanks were passed to the Scrutineers, the retiring Hon. Secretary (Mr. Goldsmith) the Hon. Treasurer (Mr. Hampton W. Pratt) the Hon. Librarian and the Hon. Assistant Librarians. A vote of thanks was also given to Messrs. Earle and Sim, Colonel Balfour, and Captain Whyte and the caste who assisted at the soirée on the 16th May. It was announced that the annual dinner would be held at the Holborn Restaurant, and the first summer visit on June 15.

NEW MEMORIALS IN ST. GILES', EDINBURGH.

UNVEILING OF THE ARGYLL MONUMENT YESTERDAY.

At the unveiling, yesterday, of the Argyll Memorial and Window in St. Giles' Cathedral, Edinburgh, by the Marquis of Breadalbane, Sir Thomas Clark handed the Memorial and Window over to the Cathedral Board. The 27th May is the anniversary of the execution of the Marquis of Argyll, and for this reason was selected for the unveiling of the Memorial. Both the Memorial and the Window are already practically completed; some gilding on the latter is all that remains to be done. The Memorial is erected in St. Eloi's or the Hammermen's Chapel, which is immediately to the west of the north doorway of the Cathedral. The Monument, placed beneath the Window, is 11 ft. 6 in. wide by 12 ft. high. It consists of a surbase of alabaster, enriched with Genoa green and vert campan marbles, supporting at each side two black marble columns and pilasters, with bronze ornaments and gilt caps and bases. These columns and pilasters carry an entablature, finished with pinnacles and pediment, enclosing the Argyll coat of arms. Between the pilasters is an elaborate elliptical arch, beneath which rests the recumbent figure of the Marquis upon a carved and moulded sarcophagus. The figure, which has been designed and executed by Mr. Charles M'Bride, is a chaste piece of Sculpture. The recumbent figure is admirably treated. The Marquis lies with his head on a pillow, the body turned to the right, and the left foot crossed over the other. The attire is a nobleman's costume of the period, kept simpler than that of a cavalier's to indicate the Marquis' leaning to the Reformed doctrines. The features are modelled from an authentic copy of a painting of the Marquis which was at Inverary, but which, unfortunately, was destroyed by fire when the castle was burned some years ago. The right hand of the Marquis, extended at arm's length, is laid upon a clasped

Bible, and the left hand holds breast high a sword of the period with gilt hilt to indicate that he was a military man as well as a statesman. The figure, as indicated, is very pictorially treated, and is altogether an excellent piece of work. The following inscriptions have been placed on the Memorial. The principal inscription is contained in an oval panel of white alabaster, and runs thus:—"Archibald Campbell, Marquess of Argyll, beheaded near this Cathedral, A.D. 1661. Leader in council and in field for the Reformed religion." Below this are the Marquis' own words:—"I set the crown on the King's head: he hastens me to a better crown than his own." On a ribbon under the panel is one of the mottoes of the Covenanters, "For Christ's crown and covenant." On a small rectangular panel immediately below the recumbent figure of the Marquis appears the verse from 2nd Samuel, "He hath made with me an everlasting covenant." "Ne obliviscaris," the motto of the Argyll family, is placed on a scroll below the coat of arms. The window, which is by the Glass Stainers' Company, Glasgow, contains the arms of the Marquis' chief adherents and friends. As space could be found for only a limited number of shields, great difficulty was experienced in making a selection, and many names are omitted in consequence which have great claims for admission. Those finally chosen are:—Earl of Sutherland (now represented by the Duke of Sutherland), Earl of Lothian (now represented by the Marquis of Lothian), Earl of Cassillis (now represented by the Marquis of Ailsa), Earl of Eglington, Earl of Loudoun, Earl of Leven, Lord Balmerino (now extinct), Lord Newark (now extinct), Earl of Dalhousie, Sir Thomas Hope (now represented by the Earl of Hopetoun), and Johnstone of Warristoun. These arms are grouped round the Argyll arms, which occupy the centre of the window. The Memorial has been designed by Messrs. Sydney Mitchell and Wilson, and has cost £1,000.

Another Memorial, that of the Lord High Commissioners of the Victorian era, in the form of a stained glass window, was opened in St. Giles', last week. The window, which is over the Royal pew, is of five lights, with transom and traceried heading. Only the five lights in the upper tier above the transom are being filled meantime, and these are to commemorate Lord Bute, Lord Airlie, Lord Aberdeen, Lord Hopetoun, and Lord Breadalbane. The uppermost portion of the tracery openings is treated with the Royal arms, whilst the arms of the five present donors appear in the remainder. The tier of the window proper, which is now being filled in, represents St. Peter and St. John before the Council of the High Priests, as recorded in Acts iv. St. Peter and John are represented in the second opening, St. Peter with outstretched hands announcing his mission to the High Priest, who is represented seated in the fourth light surrounded by his Council. Two Roman soldiers, together with the lame man whom Peter had recently healed, occupy the first light. All the subjects are shown beneath Architectural canopied ornament of a light character; whilst the whole scheme of colour is of a rich transparent nature. The lower tier of the window is intended to be filled in, with a representation of St. Peter making his defence before the brethren at Judea. When the lower subject is completed in a somewhat richer tone of colour, the effect of the whole window will be very much improved. The window has been executed at the studios of Messrs. A. Ballantine & Gardiner, George Street, Edinburgh.

THE Education Department has approved plans for the alteration of the Old Schools in High Street, Stonehouse, which are to be so converted as to give accommodation for 307 infants and 250 girls. It was decided to invite tenders for the execution of the work.

THE Kensington Board of Guardians propose to expend the sum of £20,000 in making additions to the Infirmary of the parish, and in providing fittings, fixtures, and furniture, in connection therewith, in pursuance of the Order of the Local Government Board, dated June 18, 1892, in addition to the sums of £39,000 and £6,000 authorised by the said Order to be expended for those purposes.

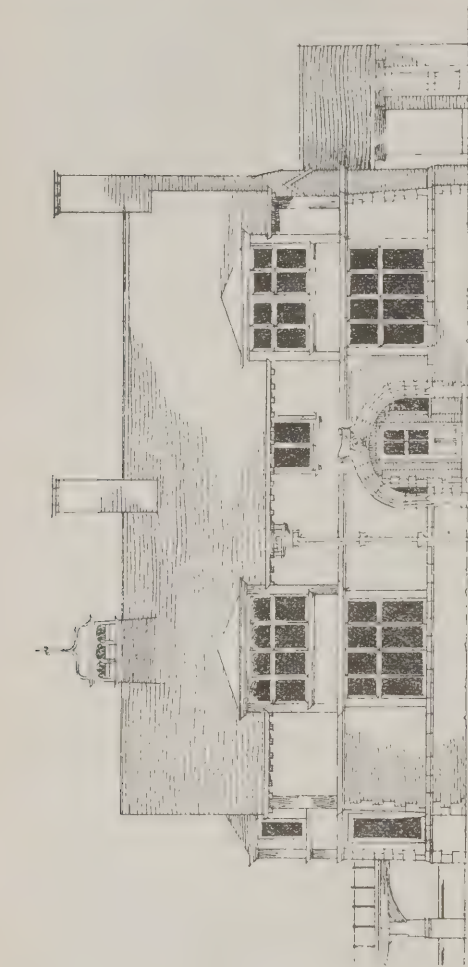
WHAT IS A WALL?

THE LORD CHIEF JUSTICE ON BUILDING CONSTRUCTION.

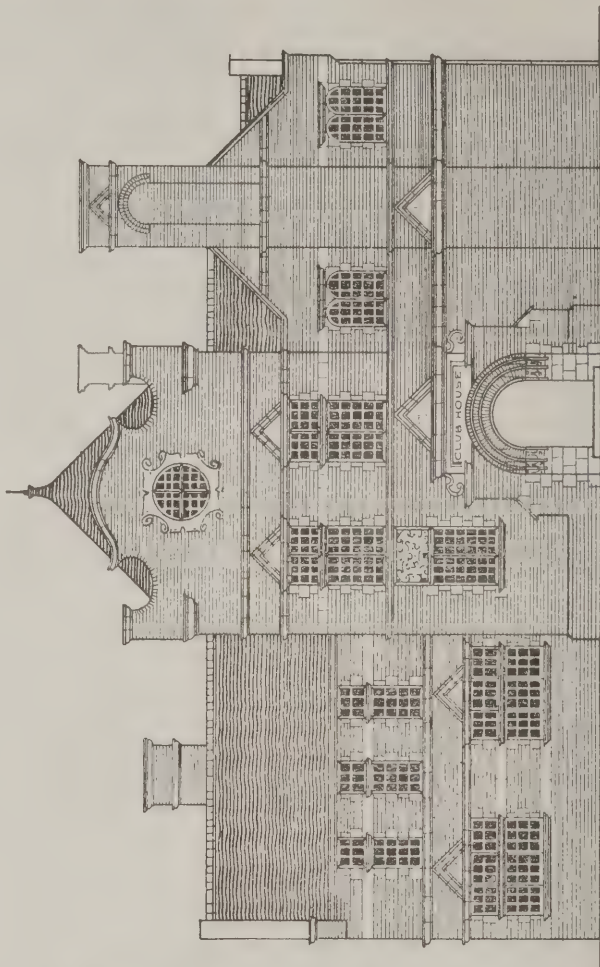
AN important decision was given in the Queen's Bench Division on Wednesday, when the Lord Chief Justice gave judgment in the case of *Badley v. the Cuckfield Union Rural District Council*, which had been argued before his Lordship and Mr. Justice Charles. His Lordship said the case raised a somewhat intricate and at the same time important question upon the construction of the bye-laws of the local authority relating to the construction of new streets and new buildings. The question arose in this way. The plaintiff, having certain property within the jurisdiction of the authority, was minded to erect a Sanatorium in connection with that property known as Bedale, and on the 21st January, 1895, he wrote to the local authority stating that he proposed to build in connection with his establishment a Sanatorium, consisting of brick and cement foundations, and walled with corrugated iron, supported by posts and rails, and lined with match-boardings. The plans which were at the time submitted, were, it appeared, not found correct, and the authority declined to sanction them. It had been agreed to submit a special case to the Court on the point in dispute, and the question for the Court was whether or not the local authority was justified in refusing its consent to the erection of the building, and that depended upon the construction of the bye-laws. Knowing, his Lordship said, how common it was to meet buildings in various parts of the country, including buildings in which persons were intended to reside, composed of an outer wall and roof of iron much in the same way as the building in question, it seemed to him remarkable that there did not appear to be any bye-laws or regulations referring specifically to such buildings, but, there being no rules dealing specifically with these buildings, the Court had to decide whether, in fact, the existing rules did cover the case of such buildings. The rule or bye-law specially relied upon by the local authority was Rule 2, which provided that "every person who shall erect a new building shall cause such building to be enclosed with walls, constructed of good bricks, stone, or other hard and incombustible materials properly founded, and solidly put together with good mortar compounded of good lime and clean sharp sand or of cement." The explanation following obviously only applied to brick or stone walls, and had no proper application to the case of iron buildings. The wall was not constructed of bricks or stone; but the rule contemplated that if not of bricks or stone, the wall must be of "other hard and incombustible material." Concrete would be such a material, and so, no doubt, would iron under certain circumstances, but what they had to ask themselves was whether the wall, as built by the plaintiff, was constructed of incombustible materials, and this raised the question: What is a wall? He did not propose to give an elaborate or exact definition of a wall, but he supposed he should be right in concluding that it must be something which would stand by itself, and if so it could not be made of corrugated iron only one-thirty-second part of an inch in thickness. Therefore the plaintiff's wall did not satisfy that test of what was a wall. The plaintiff's wall, it appeared from his own description, was constructed of an outer sheet of corrugated iron, supported by wooden posts and rails. The outer sheet of iron was only one-thirty-second of an inch in thickness, and certainly could not of itself stand alone, and the wooden framework by which it was supported, being of wood, could not certainly be said to be a hard and incombustible material. If, too, he took into consideration the matchwood lining, the case for the local authority was strengthened. Therefore he must hold that the work was most distinctly not a wall composed of brick or stone or other hard and incombustible material. Therefore he was of opinion that the wall, as constructed, was an offence against the bye-law. Judgment was accordingly entered for the defendants, the local authority, with costs.

THE Congressional Palace, the largest and most important building in Santiago, the capital of Chili, was recently entirely destroyed by fire.

No. 1.

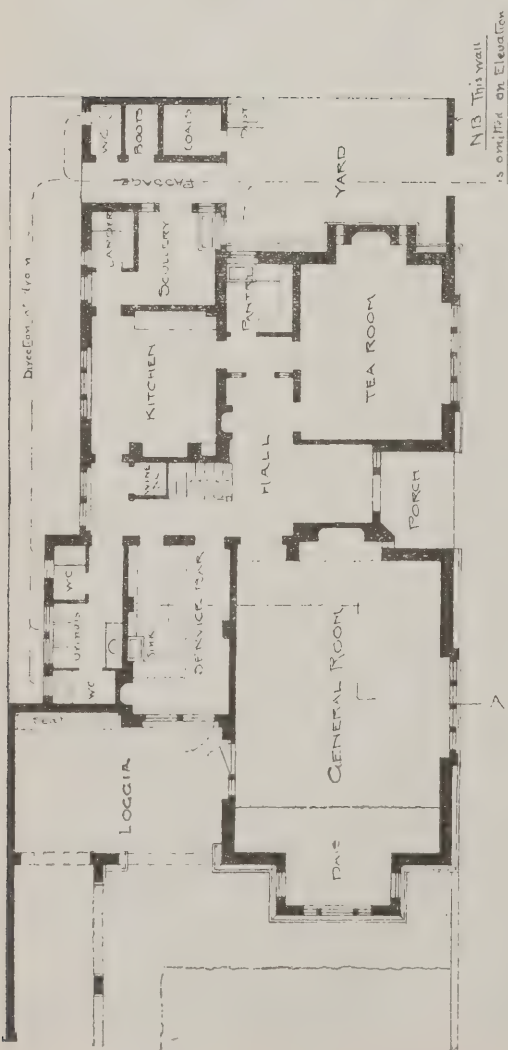


— FRONT ELEVATION —



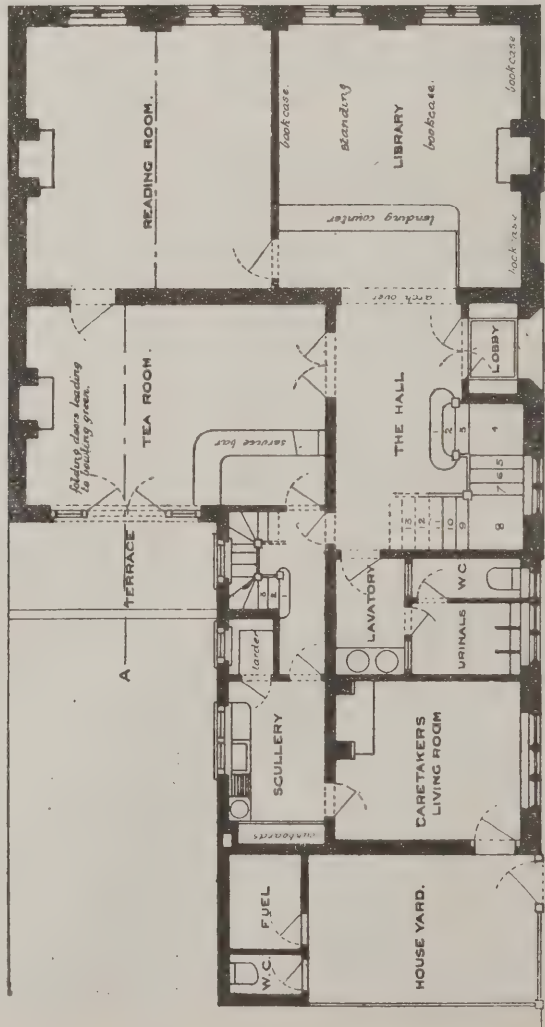
FRONT ELEVATION

"A VILLAGE CLUB HOUSE;" FIRST AND SECOND PREMIATED DESIGNS. NO. 1, "ROUGH CAST;" NO. 2, "DEMOS."



— GROUND PLAN —

No. 2.



GROUND FLOOR PLAN

SOCIETY MEETINGS.

The Society of Antiquaries of Scotland.

—Under the auspices of this Society, Dr. Joseph Anderson, on Wednesday afternoon, delivered the first of a series of ten lectures on Archaeology in the National Museum of Antiquities, Queen Street, Edinburgh. The lectures are intended to communicate the general principles of Archaeology, with demonstrations from the objects in the Museum; and the first of the course was devoted to an exposition of Archaeology—its science, its methods, &c. In subsequent lectures Dr. Anderson will deal with the various periods, and illustrate them by reference to the articles found in Scotland belonging to those different periods.

Lincolnshire Architectural Association.

—The Architectural and Archaeological Association for the counties of Lincoln and Nottingham will hold its meetings this year at Stamford, on Wednesday and Thursday, the 19th and 20th of June. On the first day an excursion will be made to Duddington, Tixover, Barrowden, Harringworth, Lyddington (where there are the remains of the Bishop's Palace), Seaton, Morcott, North Luffenham, Edith-weston and Empingham. On the second day a visit will be made to Barnack, Bainton, Ufford and Wittering. At half-past two o'clock, the company will visit the six Churches and other places of antiquarian interest in the town of Stamford, beginning with St. Mary's Church, and afterwards, those who wish to do so, will visit Burghley House, near Stamford.

Liverpool Engineering Society.—The following visits will be made to works during the forthcoming summer: Saturday, June 8, to the Liverpool Corporation Reservoirs and Filter-Beds at Rivington—Mr. Jos. Parry, M.I.C.E., Water Engineer; Friday, June 21 and Saturday, June 22, to the Main Sewerage Works, Pumping Station and Refuse Destructor of the Borough of Cambridge—Mr. J. T. Wood, M.I.C.E., Chief Engineer; Saturday July 6, to the Snowdon Mountain Rack Railway in North Wales—Sir Douglas Fox, M.I.C.E., Chief Engineer, and Messrs. Holme and King, Contractors; Saturday, August 3, to the site of the Elan Water Supply of the Birmingham Corporation at Rhayader, Radnorshire—Mr. Jas. Mansergh, M.I.C.E., Chief Engineer; Friday, September 6, to the Sunlight Soap Works, Bebbington—Messrs. Lever Bros., Limited, proprietors; and on Saturday, September 21, to the Wirral Railway Works—Sir Douglas Fox, M.I.C.E., Chief Engineer.

Royal Geographical Society.—The anniversary meeting of the Royal Geographical Society for the election of President and Council, was held in the hall of the University of London on the 27th inst., at half-past two. During the meeting the Royal Medals for the encouragement of geographical science and discovery were presented—the Founders' Medal, to Dr. John Murray, for his services to oceanography; the Patron's Medal, to the Hon. George N. Curzon, M.P., for his book on Persia, and his visits to the Pamirs and Kabul; the Murchison Grant, to Mr. Eivind Astrup, for his Arctic journeys; the Back Grant to Captain C. A. Larsen for his Antarctic voyage; the Gill Memorial to Captain J. W. Pringle, R.E., for his African surveys; and the Cuthbert Peek Grant to Mr. G. F. Scott-Elliott, for his explorations in the neighbourhood of the Victoria Nyanza.

SAWDUST.

AFTER being open for four months, intimation is now made that the Royal Scottish Academy's Exhibition will close on the 1st June. It is gratifying to know that the attendances up to the present time have been very satisfactory, and that the receipts and sales of pictures have been much above those of last year.

For the better accommodation of nurses and servants, the New Wing at Broomhill Home, Kirkintilloch, was recently opened by the Duchess of Montrose. The New Wing is a three-storey building, which contains dining-room, parlour, matron's sitting-room and bedroom, and six double and three single bed-rooms. The total cost has been £2,500.

THE Barnstaple Board of Guardians has accepted the tender of Messrs. Barwick and Karslake (£135) for the conversion of the school into a Board-Room.

MR. F. S. BUTTON, Borough Surveyor of Bromley, Lancashire, has intimated his intention of resigning his position. His salary is £550 a year.

ON Tuesday afternoon Sir George Williams opened the new Jubilee building of the Young Men's Christian Association at Croydon, which has been erected at a cost of £7,500.

AN enquiry on behalf of the Local Government Board was held at Loughborough on Tuesday last by Colonel J. O. Hasted, R.E., into an application by the Town Council for sanction to borrow £9,000 required for the purchase of a site in Island House Park for a Cattle Market, Fire Engine Station, Workmen's Dwellings, mortuary, &c.

A PORCELAIN Factory, on the model of that of Sevres, has been recently established within the precincts of the Sultan's private residence at Yildiz Kiosk. The foreman and workmen have so far been French, but they are acting as instructors to Turkish hands, under the superintendence of Selim Melhame Effendi, the future chief of the little factory.

THE Exhibition of Railway Appliances, &c., in connection with the United Kingdom section of the Imperial Institute, will be opened on Saturday, June 1st, at noon, by the Lord Chancellor. The contents of the Exhibition will, in view of the forthcoming International Railway Congress, be of a most interesting and instructive character.

THE new Birmingham Corporation Stables and Granary, which will give an additional accommodation for 25 horses, and will also supply the whole of the staff, including other 375 horses, have just been completed at a cost of £6,000, from plans by the City Surveyor. The builder was Mr. Fenwick.

THE School recently erected by Liberton School Board, was opened by Capt. Gordon-Gilmour on Tuesday last. The first estimate for the School was £4,900; but it is expected the total cost will be a little over £5,000.

A GOLD medal and a prize of the value of £200 is offered by the Bologna Academy of Sciences for the memoir describing the best system or apparatus for putting out fires by chemical, physical or mechanical means. The papers must all be in by the end of May, 1896, and may be written in Latin, French, or Italian, or in any other language, accompanied by an Italian translation.

THE Improvement Committee of the Cheltenham Town Council recommends the purchase of the Winter Gardens. If the Council approve this report, the Committee propose to advertise for plans and give premiums for the same for the erection of general buildings and of municipal offices. The Committee propose to limit the Architects to an expenditure of £10,000 on municipal buildings and £8,000 on other buildings.

ALDERMAN FALLOWS, the Mayor of Birmingham, has laid the foundation-stone of a new Free Library in Moseley Road. The building will be of brick and terra-cotta, and will cost close upon £5,000. It is intended to erect Baths on land adjoining the Library.

MEN employed to lay the pipes of the Redruth Waterworks Co. from Penstruthal to Redruth found in the main County-road, close to the site of the old toll-gate at South Turnpike, an old mine workings, or shaft, ten fathoms deep. There was no covering of any kind over it, except the hard macadamised road nine inches in thickness. Traction engines, as well as ordinary traffic, have been passing over the road for many years. The shaft is being filled up.

A NEW Wing has just been added to the main building of the Red House Home, Musselburgh. The addition, which is on the west side of the main building, includes a dormitory for fifteen boys, a large room, a dining room, and a kitchen. At present there is provision for forty-five boys, and the additional accommodation will enable that number to be increased to sixty.

THE Schools at Killick's Lane, Mitcham, Surrey, are to be enlarged, and Mr. R. M. Chart, from whose plans the present Schools were built, has been appointed the Architect.

THE Gloucester City Council has decided to sell to the Gloucester Railway Carriage and Wagon Company the freehold property belonging to the Corporation at present leased to them at £528 a year, for £20,000, subject to the approval of the Local Government Board. It is stated that the Company will erect additional buildings and introduce a new industry into Gloucester.

MR. THOMAS C. McFARLANE, of 4, Bristol Terrace, Newcastle, has been appointed Clerk of the Works of the new Asylum about to be built. The salary is £200 per annum. The expenditure on the new building will be over £100,000. There were more than 100 applicants for the post.

A NEW Temperance Hall is the latest addition to Morley. The building will be in the Classic Style, and will comprise, on the ground floor, two Secretaries Rooms, two Reading Rooms, large Class Room, and Kitchen, whilst the upper room, or Hall, will be 62 feet long by 33 feet wide, with open roof and panelled ceiling, 16 feet high, and having a platform at one end to accommodate 150. The estimated cost, including the site, is £2,000.

THE County Council is doing much good work in improving the condition of the roads and bridges in East Northumberland. The construction of Bridges at Holywell and Seaton Sluice supplied a much needed reform, and this policy of progress is to be continued at Sleepwash, where the old Bridge collapsed last January. The proposed new structure is not to be built on the site of the old Bridge, but at a point near the Anglers' Arms Inn, on the south side, and across the Wansbeck to the corner of Thieves' Bank on the other. The County Surveyor, Mr. Kynnersley, estimates that the erection of the Bridge near the Anglers' Arms will cost something like £600 more than a Bridge on the old site. The cost of the structure it is proposed to erect is estimated at £4,104.

MR. H. W. THOMAS, Coventry, at the last meeting of the Urban Council, presented plans of a new Theatre he purposes erecting in New Bridge Street. The structure is to be 84ft. long and 40ft. wide. The Council passed the plans, on the understanding that an additional exit should be made.

GAS AND OIL ENGINES.

A PROPOS of the recent boom in petroleum, a Manchester correspondent states that the leading makers of gas engines are closely watching the development of oil for heating and other purposes connected with motive power; and that as soon as petroleum shows signs of coming into more general favour as a propeller, they will be prepared to place on the market some really first class oil engines, both stationary and otherwise. It is generally felt that, although the trade in oil has grown to gigantic dimensions during the last few years, it is only as yet in its infancy. It may be mentioned that amongst the present uses of petroleum it is employed extensively for driving fixed and locomotive engines—in this country, e.g., on some of the engines of the Great Eastern and Chatham and Dover railways. By its use for this purpose economy in storage is effected and labour saved. On steamships too, it is in some cases taking the place of water ballast, and it also reduces the intense strain upon the stokers caused by continued heat. It is also stated that the number of stokers required is, by employing automatic machinery, 50 per cent. less. At Manchester it is intended to erect vast storage tanks on the Ship Canal, similar to those provided at Birkenhead, which are earning a considerable revenue for the Mersey Dock and Harbour Board. From these tanks large quantities of oil could be distributed over the railways to the industrial centres of Lancashire and Yorkshire. It may also be added that there is a great future for Russian oil, for heating and illuminating purposes as soon as it can be the better refined than at present.

The Builders' Journal COMPETITIONS.

No. 3.—Swimming Baths.

Designs for Swimming Baths in a country town of 5,000 inhabitants. To contain cold water bath fifty feet long, three feet to six feet deep, with necessary dressing boxes; six private washing baths for gentlemen and three for ladies; necessary heating and ventilating appliances to be provided, together with waiting and caretaker's rooms, the entire cost not to exceed £3,000. The site is 100 feet deep and of any necessary frontage, but entrance can only be obtained from the front. All designs to be delivered on or before Monday, the 10th day of June.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

THERE is not in Europe a more magnificent burial place than the Mausoleum in the park of Hamilton Palace, where the late Duke of Hamilton is to be interred at the end of this week. This Mausoleum was built about sixty years ago at a cost of £150,000, and Italian artists and workmen were principally employed. It is a square building, surmounted by a round tower and a stone cupola, with bronze gates, which are coupled from those of the Baptistery at Florence.

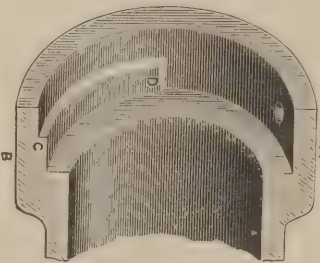
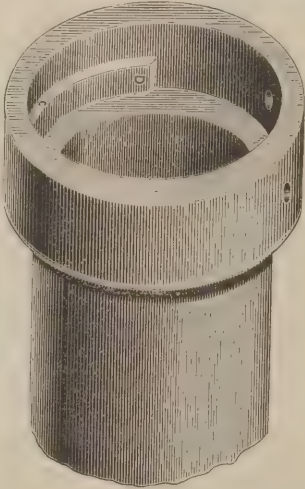
An Exhibition in the interest of photography is announced to be held at the Royal Aquarium in June. There will be competitions for amateurs and professionals.

Trade and Commerce.

Messrs. C. Isler & Co., of London, have received orders from Mr. William Whiteley, of Westbourne Grove, to fix an artesian bored tube well and deep well pump machinery in connection with it, at Avonmore Road, West Kensington. The preference was given to this firm owing to their latest arrangements and improvements in their deep well pumping machinery, which was approved by Mr. G. D. Dennis, M.I.M.E., the engineer under whose superintendence the work is carried out. The same firm have orders to supply all the turnstiles at the Earl's Court Exhibition.

The Soho Foundry.—The purchasers of the Soho Foundry, we are informed, are Messrs. W. and T. Avery (Limited), the well-known manufacturers of weighing apparatus. The purchase includes the fixed plant and machinery, but Messrs. James Watt and Co. will be allowed to retain possession until their present contracts are completed; so that it will be three months, probably, before Messrs. Avery enter into full possession. Messrs. Avery intend to concentrate at Soho the operations carried on at Mill Lane and Moat Lane, Birmingham, the repairing department in the Bull Ring, and the foundry at West Bromwich. The original premises, those in Digbeth, where are registered offices of the Company, may possibly be retained for the sake of their associations and as a Birmingham depot, but the decision of the directors on this point has not been made known. The firm dates from 1730, when its business began in a small way in Digbeth. It now employs in the Birmingham and West Bromwich establishments seven or eight hundred workpeople, about a hundred and fifty of them being at West Bromwich. There are also branches in London, Plymouth, Manchester, Glasgow, Leeds, and Sheffield, at all of which either repairing or manufacturing work is carried on, the Glasgow branch comprising a foundry. The necessity for consolidating the various establishments in the Birmingham district has long been felt, and the increase in business during the last few years has made the matter one of some urgency. Messrs. Avery's business was carried on as a private concern until 1891, when a limited company was privately formed under the style of W. and T. Avery (Limited). In December last the present company, bearing the same name, was registered, some readjustment of the proprietary having become necessary after the death of Alderman Thomas Avery; but, as in the former case, no prospectus was issued. The capital authorised is £200,000, divided into 20,000 ordinary shares of £5, and 20,000 cumulative 5 per cent. preference shares of £5 each. Seventeen thousand of each kind of shares, fully paid up, have been issued. Most of the capital has been subscribed by members of the Avery family and their personal friends, and by employees.

Green's Truinvert Pipe.—This new pipe, the patent of one of the Partners of Messrs. Oates & Green, of Halifax, the well-known manufacturers of clay goods and builders' requisites. This invention, we take, is presumed to be an improvement upon a very similar pipe in the market, and the improvement claimed is that, whilst it is impossible for a series of these pipes to be laid with an untrue invert, there is sufficient space round the spigot, after its insertion in a socket, for making a perfect joint of clay or cement in the ordinary way. The invention appears to us a simple and a very good



one, except that there appears to be no "seating" of cement or clay, between the spigot end of the pipe and the "lip" or "rest" of the socket. There is no question, however, that with these pipes it would be impossible to get either a defective invert or joint, and therefore we have no hesitation in pronouncing them worthy of great consideration by engineers and surveyors. The sketch which is given shows the construction of the pipe, and in the catalogue which Messrs. Oates & Green send us, we notice that the price is only 33s per cent. more than that of ordinary pipes.

Acoustics in relation to Architecture and Building.—Messrs. Crosby Lockwood & Co., send us the new edition of this little work, which has been for some years a very

useful book in the *Weale's Rudimentary Series*. Professor T. Roger Smith, the author, does not claim much for his manual; he states that "it has simply been framed with a wish to afford, in a somewhat connected form, as much information relative to the laws of sound and their application to the arrangement of buildings as could be collected from trustworthy sources." And the Professor has admirably achieved his task. In a footnote relating to the derivation of the word *Acoustics*, the author shows us how and why the second syllable should be pronounced *cow*, and not *coo*. The explanation is quite acceptable, but we consider it time that a little English common sense is brought to bear upon words derived from the Greek and Latin tongue. As *coo* is far more phonetic and far more pleasing to the ear than the harsher syllable, we always speak it, and we trust the majority of our friends—including Professor Roger Smith—will follow our example.

The Rockingham Railway and Jarrahdale Timber Co., Ltd., and Others v. J. Temperley & Co. and Others.—This action, which was to restrain the Defendants from advertising with reference to Karri and Jarrah that they were "the only importers of both timbers in the United Kingdom," has been settled by the Defendants agreeing to a perpetual injunction with costs.

New Opening "In and Out" Casement.—Messrs. E. Farrar & Co., of Berners Street, have submitted us a model of their new casement, which in reality consists of a hinged inside rim which acts as the inward stop to the sash, which is pivoted top and bottom. Two thumb screws—which should be attached to the frame in some way to prevent them being lost—when released allow this rim to fall outwards, when naturally the casement comes inward, also for cleaning purposes. The illustrations which accompany an advertisement of this casement in the present issue will show the working of the invention, which has the distinctive quality of being extremely simple in parts, none of which can possibly get out of order. The casement is perfectly watertight, and the makers gladden us with the information that its cost is but very little more than the single way casement.

The Building Trades' Dispute.—Under the auspices of the London Building Trades' Federation a meeting of members of all sections of the federation was held on Sunday morning, at the St. Pancras Arches, Kings Cross, "for the purpose of considering the attitude of the master builders in the present crisis." Mr. W. Geard (United Builders' Labourers' Union) said that the building trade throughout the Metropolis was passing through a crisis which threatened at any moment to assume a serious aspect. The attitude of the masters with reference to the many questions at present in dispute would undoubtedly precipitate matters, and he could assure the members of the Federation that nothing would be left undone to secure the ends they had in view. It could not be denied that the approaching conflict in the building industry demanded the serious attention of all building trade workers. The attempt of the employers to force new conditions upon them, which, if successful, would deprive them of their liberty and freedom as workmen, was only what they had been warned would happen, if by apathy and indifference, they placed the means in the masters' hands. When weakened by slackness of trade, reduced by hunger to a point of despair, and a spirit of indifference overtook them, there was the opportunity the employers would take to regain any advantages previously obtained. The Masters' Association had given notice that after a certain date piece work, which had always been a vexed question in that particular industry, should be again introduced. Although the time had expired, the masters had deferred the matter until June 1, in order to give the London workers engaged in the building trade an opportunity of deciding either one way or the other. The men had decided, by an overwhelming majority, against any alteration of the agreement arrived at in May, 1892, but still the employers were determined that the proposed change should come into operation on June 1. The Federation, however, was determined to resist this alteration, which meant a renewal of the slavery and injustice which characterised the building trade prior to the year 1892. A resolution upholding the action of the Federation during the present crisis was carried unanimously.

ISLINGTON has followed the example of Kensington, and appointed a lady sanitary inspector. Her name is Miss Jessie Gray, and her salary is to be £150 a year.

A SECOND High-Level Bridge between New York and Brooklyn is projected. The growing traffic, and the projected union of the two sides of the river under the Greater New York Bill, may justify the undertaking. The present Bridge, which was opened in 1883, took thirteen years to construct. It is 135 feet above the East River, its length is 5,989 feet, and it cost £3,000,000.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BASFORD (Notts).—For the erection of a laundry at the Workhouse, for the Union Guardians, Mr. H. Walker, architect, Newcastle Chambers, Nottingham. Quantities by architect:—

Hopewell, G., and Sons	...	...	£2,332	5	10
Dove, J., ...	...	...	2,210	0	0
Dennett and Williamson	...	...	2,163	0	0
Attenborough, J., ...	...	...	2,068	0	0
Shaw, W. E., ...	...	...	2,050		
Vickers, J. H., ...	...	...	2,035	17	3
Price, J. F., ...	...	...	2,025	0	0
Hodson and Son	...	...	2,025	0	0
Vickers, H., ...	...	...	1,980	0	0
Shaw, J., Sherwood Rise, Nottingham (accepted)	...	...	1,940	0	0
Pinkett, W. (withdrawn)	...	...	1,709	0	0

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER OR ZINC

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, **PETERBOROUGH**.
Brickworks and Railway Siding on Great Eastern Railway.

METAL
CASEMENTS of
every description.
GLASS ROOFING
Shelley & Co's & Hopes Patents

HENRY HOPE 55 LIONEL ST. BIRMINGHAM
LONDON 13 King St. Cheap side.
MAN - CHESTER 8 Exchange Arcade.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO. Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

BOURNEMOUTH.—For alterations and additions to the Congregational Church, Pokesdown. Messrs. Lawson and Donkin, architects and surveyors, Yelverton Chambers, Bournemouth. Quantities supplied:—

Baker, G.	...	£1,693	0	0
Smith, H.	...	1,050	0	0
George and Harding	...	1,023	0	0
Hoare, Wm.	...	1,013	0	0
McWilliam and Son	...	1,010	0	0
Entwistle and Cox	...	1,000	0	0
Jenkins and Sons	...	986	0	0
Elouck, F., Bournemouth (accepted)	...	895	0	0

CARDIFF.—For the erection of a pair of semi-detached cottages, Peterstone-super-Ely. Mr. E. J. Williams, architect, 14, High-street, Cardiff. Quantities by architect:—

Jones, D. C., and Carr	...	£595	0	0
Hatherley and Co.	...	538	0	0
Gorman, D.	...	460	0	0
Morgan, Henry	...	433	0	0
Cookley, C. H.	...	432	0	0
Darke, Frederick	...	429	0	0
Evans, Benjamin	...	420	0	0
Powell, D., and Son, Cardiff	...	403	14	0

* Accepted subject to certain reductions.
† Broseley tiled roof.

CARDIFF.—For bottling stores, extension to brewery, and electric lighting, County Brewery, Cardiff, for Messrs. William Hancock and Co., Limited. Messrs. J. P. Jones, Richards and Budget, and Charles C. Jones, joint architects:—

Stephens, Bastow and Co., Ltd.	...	£13,250	0	0
Knock and Wells	...	13,105	0	0
Davies, Henry	...	12,087	0	0
Allan, James	...	12,047	0	0
Lathey and Co.	...	12,898	0	0
Turner, E., and Sons, Cardiff	...	12,048	0	0
Berridge, A.	...	12,458	0	0

* Accepted.

BRISTOL.—For the erection of banking premises, Corn-street, for the Wilts and Dorset Banking Company, Limited. Mr. G. M. Lilley, architect, 17, Craven-street, W.C. Quantities by Mr. F. M. Puskey, 10, John-street, Adelphi, W.C.:—

Mullings, R. B.	...	£12,300	0	0
Davis, J. E.	...	11,598	0	0
Stephens, Bastow and Co.	...	11,198	0	0
Church, W.	...	10,978	0	0
Williams, G. H.	...	10,775	0	0
Humphreys, Geo.	...	10,743	0	0
Durnford, M.	...	10,680	0	0
Love and Waite	...	10,623	0	0
Walters, E.	...	10,620	0	0
Jones and Co.	...	10,600	0	0
Forse, H. A.	...	10,500	0	0
Hatherley and Carr	...	10,345	0	0
Hayward and Wooster	...	10,189	0	0
Cowlin, W., and Son	...	9,873	0	0
Hayes, C. A.	...	9,207	0	0

CORTON (near Lowestoft).—For new church schools, Corton. Messrs. Bottle and Olley, architects, 5, Queen-street, Great Yarmouth. Quantities by architects:—

Sewell, E.	...	£1,471	0	0
Allerton and Earl	...	1,445	0	0
Beckett, G.	...	1,365	0	0
Ward, J.	...	1,355	10	0
Bray, F. W.	...	1,276	0	0
Grimble, F.	...	1,244	0	0
Hawes, G. E., Norwich (accepted)	...	1,240	0	0

CROYDON.—For the conversion of Nos. 48 and 50, George-street, into shops, and building a new house and shop adjoining the same, for Mr. C. Evans. Mr. Robert M. Chant, architect and surveyor, Union Bank Chambers, Croydon, and Vestry Hall, Mitcham:—

Horrocks, J.	...	£2,910	0	0
Page, S.	...	2,850	0	0
Burges, J.	...	2,590	0	0
Burnard, E. J.	...	2,475	0	0
Hanscomb and Smith	...	2,170	0	0
Hubbard, P. R., Croydon (accepted)	...	1,921	0	0

CARTER & CO

TILES MOSAIC FAIENCE Poole Dorset

DERBY.—For the erection of new labour sheds, Derby Union. Messrs. Coulthurst and Booty, architects and surveyors, Derby. Quantities supplied:—

Walkerderine, W.	...	£124	0	0
Weston, R.	...	111	0	0
Morley, E.	...	108	0	0
Young, Messrs. I. and R.	...	107	2	9
Chattell, E.	...	107	0	0
Wagg, G.	...	99	18	3
Brown, A.	...	99	0	0

EDGEWARE (Middlesex).—For the erection of School Buildings, &c., for the School Board. Mr. R. W. Cribb, Architect, Edgware. Quantities by Mr. C. R. Handcock, 47, Old Broad-street:—

Haines, H.	...	£3,850	0	0
McCormick and Sons	...	3,787	0	0
Godson, G., and Sons	...	3,716	0	0
Anley, J.	...	3,635	0	0
Batley and Holners	...	3,359	0	0
Dupont, F.	...	3,350	0	0
Gough and Co., Hampstead	...	3,104	0	0

* Accepted.

HANWELL.—For additions to the Hanwell National Schools, for the Managers. Mr. Wm. Pywell, Architect:—

Lee, H. S.	...	£1,415	0	0
Brown, W.	...	1,385	0	0
Brown and Son	...	1,378	0	0
Dorey and Co.	...	1,375	0	0
Hanson, A. and B.	...	1,347	0	0
Nye, T.	...	1,341	0	0
Jamieson, A. (accepted)	...	1,340	0	0

HERNE BAY.—For the erection of a Small Summer Residence for Mr. Joseph Odell. Messrs. Clark and Hutchinson, Architects, 28, John-street, Bedford-row, W.C. Quantities supplied:—

Denne, G. H., and Son	...	£1,188	0	0
Denne, W. and T.	...	1,140	0	0
Adams, E. T. J.	...	1,120	0	0
Cornelius, T.	...	1,096	0	0
Ingleton, A. S.	...	987	0	0

LEEDS.—Accepted for the erection of three proposed residences at Roundhay, Leeds, for Sir John Burton, Bart., M.P. Mr. W. Carby Hall, architect, Prudential-buildings, Park-row, Leeds. Quantities by architect:—

Thompson and Sons, bricklaying and masonry	...	£3,041	0	0
Benton, T., carpentry and joinery	...	1,686	0	0
Lindley, J., plumbing and glazing	...	438	9	2
Moore, T., plastering	...	382	0	0
Taylor, W., painting	...	69	10	0
Watson and Worsnop, tiling	...	380	0	0

(All of Leeds.) £5,900 19 2

LONDON.—For redecoration, &c., to the old "Park Horse" public-house, for Messrs. Fuller and Co., Griffin Brewery, Chiswick. Mr. J. Hume, architect and surveyor, Chiswick:—

Baker	...	£170	17	0
Adamson	...	170	0	0
Hunt	...	155	0	0
Rogers, C.	...	145	0	0
Leeder, T., and Co. (accepted)	...	158	10	0

E. FARRAR & Co.,

69, BERNERS STREET, LONDON, W.,

And at MANCHESTER and GLASGOW,

MAKERS OF HIGH CLASS CASEMENTS,

Specialities—The "CLIMAX" and "ECLIPSE"
Casements (Regd.)

THE NEW PATENT

"OPENING IN AND OUT" CASEMENT,

Simplest and Cheapest in the Market and
Guaranteed Weathertight.

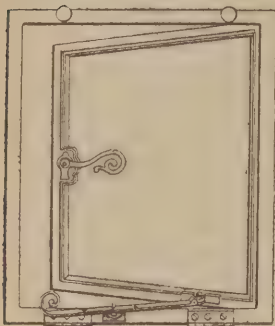


Fig. 1. Shewing Casement Opening Out.

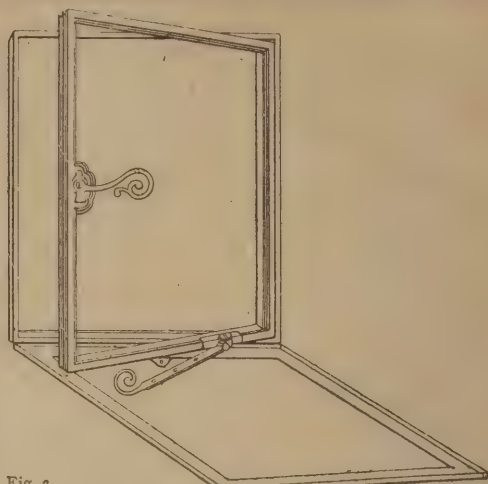


Fig. 2.

Casement Opening in with frame down for cleaning purposes.

LONDON.—For alterations and decorations to the "Crown and Sepire" public-house, Melina-road, Hammersmith, for Mr. John Hopkins. Mr. J. Hume, architect and surveyor, Chiswick:—

Drake	£377	0	0
Baker	362	10	0
Speachley and Smith	355	0	0
Rogers, C.	355	0	0
Pope and Co.	298	0	0
Knight, C. W. (accepted)	274	10	0

LONDON.—For repairing, cleaning, painting, &c., of the buildings of the Cleveland-street Sick Asylum, for the Managers of the Central London Sick Asylum District. Mr. S. Cross, architect:—

	Main	Specification.	No. 2.
Barber and Bellamy	£2,696	0	0
Smith, J.	2,262	0	0
Mills	2,069	0	0
Wright	1,973	0	0
Bangs, J. and H.	1,845	0	0
Knight, W.	1,745	0	0
Batchelor	1,696	0	0
Neal	1,673	0	0
Wall, H.	1,666	0	0
Marchant and Hirst	1,647	0	0
Knight and Son	1,451	0	0
Dorrell and Co.	1,371	0	0

LONDON.—For painting exterior, &c., of Princes-road School for the School Board for London. Mr. T. Bailey, architect:—

Verbury and Son	£250	0	0
Chinchin	194	10	0
Callow	186	0	0
Vernall and Danes	184	0	0
Neal, G.	182	0	0
Clifton	180	0	0
Marchant and Hirst	153	0	0
Cruyw, T.	150	0	0
Graham and Graham	150	0	0
Chappell	93	10	0

LONDON.—For alterations and decorations to No. 4, St. Albans-villas, Highgate-road, N.W., for Mr. E. A. Atkinson. Mr. G. Gordon Stanham, architect, roob, Queen Victoria-street, E.C.:—

Kerry	£350	0	0
Appleby, John, Cornwall-road, S.E.*	332	0	0

* Accepted.

LONDON.—For the erection of mortuaries, &c., St. Mary-church-street, for the Rotherhithe Vestry. Mr. Norman Scorgie, surveyor, Lower-road, Rotherhithe. Quantities by surveyor:—

Knight, Hy., and Son	£1,219	8	10
Williams, R. E., and Sons	1,146	0	0
White, A., and Co.	1,277	0	0
Bullers, J.	1,137	0	0
Chafen, Saml.	1,123	0	0
Balaam Bros.	1,110	0	0
Pavey, Wm.	1,073	9	0
White, T., and Son, Fairfield-road, Bow (accepted)	998	0	0

LONDON.—For the extension of "Kettner's" Restaurant, Church-street, Soho, W., to Greek-street, for Mr. G. Sangiorgi (Contract No. 2). Messrs. Jno. Waldram and Son, surveyors, 17, Buckingham-street, Charing Cross, W.C. Quantities supplied:—

Barker and Co.	£2,343	0	0
Lansdown and Co.	2,097	0	0
Longmire and Co.	2,096	0	0
Grover and Son	2,035	0	0
Nicholson	1,985	0	0
Holloway	1,980	0	0
Johnson, W. and Co., Limited, Wandsworth Common (accepted)	1,955	0	0

(Surveyor's estimate, £1,974.)

PONTPOOL.—For new infirmary, Griffithstown, Pontpool, Mon. Mr. E. A. Lansdowne, Newport, Mon, architect:—

Stephens, Bastow and Co., Bristol	£7,595	0	0
Perkins, Parsons, and Co., Cardiff	7,552	4	7
Locke, C., Newport	7,471	0	0
Bailey and Sons, Pontnewydd	6,995	0	0
Jones and Sons, Newport	6,864	0	0
Church, W., Bristol	6,854	0	0
Hatherley and Carr, Bristol	6,805	0	0
Jenkins, J., Newport	6,350	0	0
Farfitt, H., Pontnewydd	6,290	0	0
Warburton, S., Manchester	6,179	0	0
Morgan and Evans, Pontnewydd	5,972	14	0
Linton, J., Newport	5,851	0	0
Price, W., Newport	5,677	0	0

LONDON.—For drainage and sanitary work at the "Rectory," Clapham, for the Rev. C. P. Greene, rector. Under the superintendence of Mr. Frederick Colyer, M.Inst.C.E., 18, Great George-street, Westminster, S.W.:—

Jennings, G.	£395	0	0
Burrell, F. W., Clapham (accepted)	382	0	0

LONDON.—For refitting the offices of all departments of the Woods-road school, Peckham, with stoneware troughs and automatic flushing tanks, for providing additional offices for the infants' department, and a new system of drainage, for the School Board for London. Mr. T. J. Bailey, architect:—

Higgs, F. and H. F.	£1,694	0	0
Hammond, W.	1,654	0	0
Rice and Son	1,654	0	0
Lathey Bros.	1,614	0	0
Downs, W.	1,427	0	0
Calnan and Co.	1,358	0	0
Parker, G., Peckham*	1,260	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For the provision of a manual training centre in connection with the Deptford Lower-road school, for the School Board for London. Mr. T. J. Bailey, architect:—

Holt and Sons	£1,850	0	0
Nightingale, B. E.	1,542	0	0
Downs, W.	1,495	0	0
Akers and Co.	1,448	0	0
Bowyer, J. and C.	1,448	0	0
Mid-Kent Building and Contracting Works, Limited	1,405	0	0
Marsland, J., Walworth*	1,370	0	0

* Recommended for acceptance by the Works Committee.

LADDERS, BARROWS, STEPS,

TRESTLES, SCAFFOLDING,

For Sale or Hire.

J. BATCHELAR & CO.,

48, HAMMERSMITH ROAD, W

Quantities, &c., Electrographed

Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.

Telegrams, "OLDACRES, LONDON."

ESTABLISHED 1866.

J. J. ETRIDGE, JR.

SLATE MERCHANT,
SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part
of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate
delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,

Bethnal Green, London, E.

LONDON.—For constructing new offices for the teachers of the Alma School, Bermondsey, for refitting the offices of all departments with stoneware troughs and automatic flushing tanks, and for providing a new system of drainage, for the School Board for London. Mr. T. J. Bailey, architect:—

Nightingale, B. E.	£1,245	0	0
Downs, W.	1,210	0	0
Lathey Bros.	1,179	0	0
Calnan and Co.	1,125	0	0
Marsland, J.	1,085	0	0
Leeks and Hooker, Webber-row*	995	0	0

* Recommended for acceptance by the Works Committee.

NEW MALDEN.—For the erection of a house at New Malden. Mr. Thos. V. Herbt, Davison, architect:—

Young, W. M., Kingston	£895	0	0
Dolling and Co., Kingston	739	0	0
Williamson and Griffith, Kingston	675	0	0
Pither, G., Windsor	612	0	0
Schofield, James, New Malden	550	0	0
Sanders, J. W., New Malden	539	0	0
Glass, John, Surbiton	510	0	0
Wilcox, J. G. M., Twickenham	499	0	0
Kendall, C., Norbiton (accepted)	455	0	0
Davison, J., Croydon (too late)	445	0	0

PENARTH.—For the erection of new Baptist Chapel, Stanwell-road, Penarth. J. P. Jones, Richards and Budgen, architects:—

Davies, David, Cardiff	£3,770	0	0
Lathey and Co., Cardiff	3,750	0	0
Berridge, A., Cardiff	3,710	0	0
Davies, D. J., Cardiff	3,670	0	0
Allen, James, Cardiff	3,600	0	0
Shepton, J. S., Penarth	3,590	0	0
Marsh and Wride, Cardiff	3,512	15	6
Wilkins, G. H., Bristol	3,490	0	0
Turner, E., and Sons, Cardiff	3,488	0	0
Jones, John, Penarth	3,397	16	0
Gibbon, H., Cardiff	3,380	0	0
Richards, E. F., and Co., Barry Dock	3,116	14	6
Bevan, T., Penarth (accepted)	3,080	0	0

Architect's estimate, £3,354.

PONTPOOL.—For the building of the new West Monmouth boys' school at Pontypool, to be established in connection with the Jones Charity:—

Hatherley and Carr	£27,298	0	0
Cowlin, W., and Sons	27,197	0	0
Perkins, J.	26,319	0	0
Wilkins, G. H.	25,740	0	0
Bowers, W., and Co., Hereford	25,347	0	0

[Rest of Bristol.]

SWANSEA.—For the erection of new markets, Swansea. Messrs. Wilson and Moxham, architects, Swansea:—

Williams, J. D., Knighton	£24,942	0	0
Jenkins, Dd., Swansea	21,400	0	0
Watkins, Thomas, and Co., Swansea	20,605	0	0
Gustavus Bros., Swansea	20,442	0	0
Bennett Bros.	19,943	0	0

WADDESDON (BUCKS).—For new British schools, offices, and boundary walls at Waddesdon. Quantities supplied, Mr. W. F. Taylor, Aylesbury, architect:—

Wallis and Sons, Chesham	£2,045	0	0
Sherwin, H. H., Waddesdon	1,860	0	0
Gibson, G. H., High Wycombe	1,795	0	0
Hunt, C. H., High Wycombe	1,793	0	0
Holland, J., Waddesdon	1,701	19	0
Siarey, Aylesbury	1,517	0	0
Crook, C., Waddesdon (accepted)	1,497	2	0

WORTHING.—For alterations and repairs to fifteen houses, Nos. 69 to 97, Clifton-road, Worthing, for Mr. C. Evans. Mr. R. M. Chart, F.S.I., Union Bank Chambers, Croydon, and Vestry Hall, Mitcham, architect and surveyor:—

East, J. A.	£1,600	0	0
Ballard, J., Croydon	1,517	0	0
King, J. G.	1,485	0	0
Crouch, A.	1,330	0	0
Sandell, F.	1,397	0	0
Evans, S. J., Carshalton	1,180	0	0
Hubbard, P. R., Croydon	1,170	0	0

SPHINCTER WORKS,

EMERSON STREET, LONDON, S.E.,

MANUFACTURERS OF

LECLANCHE BATTERIES, TELEPHONES,

ELECTRICAL THERMOGRAPHS,

WATER TELEGRAPHS, and COMPLEX

COMMUNICATIONS of all kinds.

The Builders' Journal.

Vol. I., No. 17.

Tues., June 4, 1895.

ILLUSTRATIONS.

Tower of San Fermo, Verona: By H. L. Florence .. 257
Entrance to Convalescent Home: By Cheston & Perkin 258
Interior of a House at Bedford:
By Messrs. Scott & Morris 258
Model of Mr. Prior's House in Dorset 259
Design for Book Cover: By A. A. Turbayne 261
New Volunteer Memorial, Exeter: Designed by S. K.
Greenslade, A.R.I.B.A., Executed by Harry Hems
& Sons 261

Summer Cottage in the Isle of Wight:
By Aston Webb 263
Coombe Farm: H. L. Florence, Architect 264
R.A. Gold Medal Design for a Theatre:
By H. L. Florence 265
New Library for the Hon. Society of Gray's Inn:
Isaacs & Florence, Architects 267

CONTENTS.

Fellowship of the Institute 257
The Judge and Jerry 257
Architecture at the Academy 258
Bricks and Mortar 260
Men who Build, No. 15.—
Mr. Henry Louis Florence 264

Modern Grammar School 266
Architecture and Antiquity in the East
Riding 266
The Prejudice against English Art 267
Architecture and Design: By Walter Crane 268
The Art of Phil May 269

Perilous State of Peterborough Cathedral 269
The Question of Revising the R.I.B.A.
Fellowship 270
The Frescoes at the Royal Exchange 270
Society Meetings 271
The Builders' Journal Competitions 272
Trade and Commerce 272

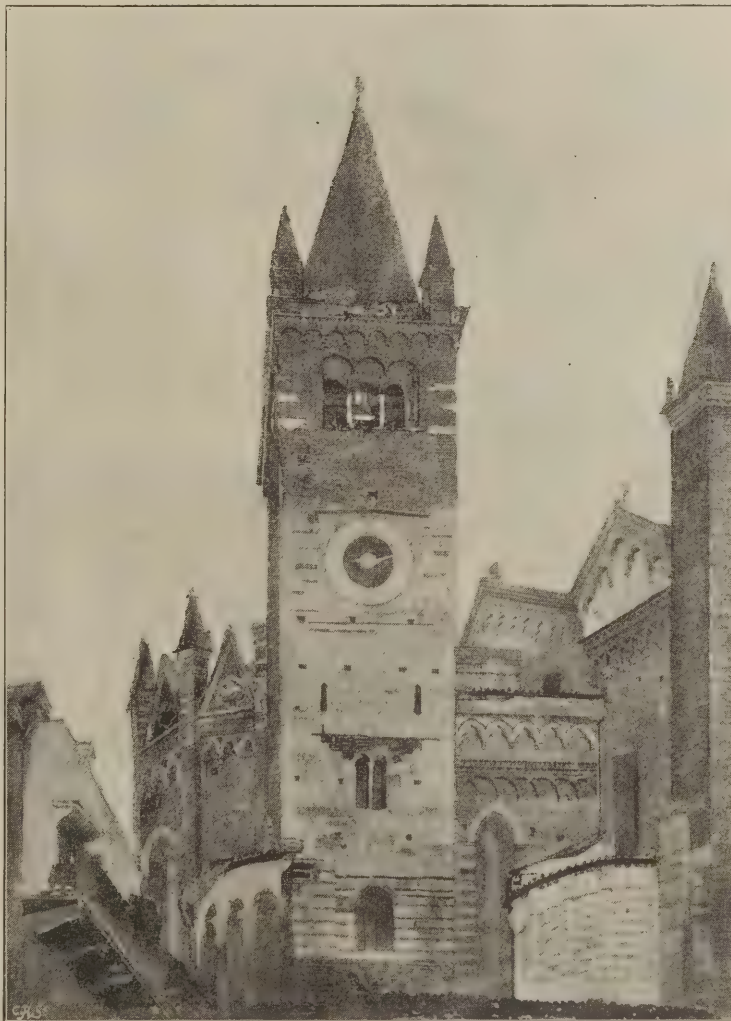
Fellowship of the Institute.

ON Monday of last week we were invited to attend a meeting of a number of Associates of the Institute at Dr. Williams' Library, Gordon Square, the meeting being convened for the purpose of considering the replies to a certain circular which had been sent to the candidates for Councillorship of the Institute. The circular—a copy of which we received—was not a very impressive document, the whole thing bearing more plainly the imprint of the revolt that is brooding in the hearts of the younger generation, rather than any more significant fact of immediate importance. Our views upon the condition of the Institute are now well known, and we have well-founded information, that, if the voting of Saturday last has gone in one particular direction, there will be revolutions at Conduit Street after all. And we shall be sorry, for, though we have pointed out many necessary and drastic reforms, it will be much more dignified if the movement come from the elders of the Profession. But really this question of who should be eligible for Fellowship of the Institute is not of the highest importance now. It is the questions which affect the reputation of the Profession itself, and the standing of its members, that bear so strongly on the work of a very imperfect system. All this twaddle about "Art" versus the "Profession" of Architecture stinks in the nostrils of every sensible man who happens to be an Architect, and it is this twaddle, promulgated principally by a journal which has a hundred times sacrificed every vestige of Professional principle and dignity, that brings about the possibility of such a sight as a handful of earnest and well-meaning young men being compelled to catechise their elders as to what they will do

if they be elected to the ruling of the Profession. The situation is becoming ridiculous, but even a ridiculous situation from which something must come is better than the stagnation into which the work of the Institute has drifted. Even our contem-

but, behold, it is astonished that "a recent paper on Early Architecture in this country, a subject of the greatest interest and entirely above mere professional considerations, was read to nearly empty benches." Oh! these professional considerations, these revolting fallacies that canker the industry and the intuition of aspiring men, whilst the "considerators" are swallowing up the commissions and delivering lectures on the high Art racket. It is monstrous that the sixty well-intentioned men who signed this circular, appertaining to Fellowship of the Institute, could not get on with their studies or their practice, and leave matters of great pith and moment to those whose business it is to keep a watchful eye upon the interests of the Architectural Profession. It is not by such methods of attack that the Citadel will be successfully stormed, that at least is what we should have hoped, but we may be wrong. These Associates may know more surely than we do, even, how utterly useless it is to hope for anything from "above," and so they elect to score off their own efforts. If it becomes necessary that they should—and we still hold back our final opinion—then may they throw every atom of enthusiasm into the battle and win. The Institute as at present constituted struggles away its existence in legislating for the men who are without their gates. Perhaps the younger men consider it, as we do, about time that something should be done for those that are within.

It is opposed to the best traditions of the Law that a Judge should become irate, but a certain Builder, whose name shall mercifully be veiled, had a humiliating ten minutes in the Croydon County Court last week. Justice



TOWER OF SAN FERMO, VERONA: BY H. L. FLORENCE.

porary of Catherine Street has at last woken to the revelation that dissatisfaction with the Institute causes it no surprise,

has been a little prone to air its superior virtue at the expense of other trades and professions of late, and we have had the dignified spectacle of a Lord Chief Justice pronouncing upon iron and concrete walls. We are not in love with iron as a building material, neither are we fully convinced of the unalloyed merit of concrete, but we are quite reassured of the infallibility of the Law, and this after some doubts and dismays. It may be true that the general and daily aspect of the Law Courts—Street's masterpiece—for which Architecture will have something to answer when Truth is finally come to Judgment, is, on the face of it, a serious and severe impeachment of the honesty of the Law. We, like the rest of thinking folk, have been puzzled to wonder if all this machinery be moral in the broad sense; whether, after all, there is not the speculative smooth-tongued barrister as well as the speculative easy conscientious builder; but "lay" fears may be set at rest, seeing that Judges go on "slogging" and castigating poor Jerry as if he had not even a shred of a soul for his own. Perhaps he has not, but a County Court is hardly the place in which to discover many. His Honour Judge Lushington had hardly breath enough in his body wherewith to be sufficiently emphatic, for "John Jerry" had now failed to the tune of six thousand pounds, while his assets scarce passed the thousand. A commiserating Counsel, daring to speak a word in so Caesarean a Court (spurred, no doubt, by fees), spoke of his client not having "a penny in the World." It is so common a condition that it has become almost a figure of speech. But penury awakes no pathos in the legal mind, and Jerry had been guilty of a "very disgraceful failure." All failures are not disgraceful, but we invariably note that in the eyes of the Law *all* building failures are. This is unjust. A man may honestly speculate in building as in anything else; all trades and professions are, in the main, ground for speculation; if a man succeeds he is a "good business man," certified and duly accredited; if he fails, he is at once knocked into a corner for every one to pound at. We are not defending this particular Jerry, but we do emphatically resent Judge Lushington's remark that it was "difficult to believe a building man." It is no more difficult to believe a building man than any other man, and we have heard of more than one "eminent" Q.C. whose *strong* point was an ability to confuse the jury! We really do want a little less cant in this country and a greater simplification of Law. If Law is equivalent to Truth, let Law set the example to jerry builders. In Croydon Court the building man was told to "stand 'umble," as if it were a matter for debate whether he should stand at all. We rather fancy the sight of John Jerry on his knees would have been a more singular and soul-shaking business. That such small failures as this should "throw great disgrace on the whole building trade of this country," leaves to the imagination the magnitude of dishonour when big men fail to the extent of hundreds of thousands of pounds. This John Jerry was trying to get work and was living with his mother-in-law—surely not the happiest of conditions, but the Judge thought him evidently not sufficiently cowed and cast down, for he abjured him to "stand 'umble," and "umble" John Jerry stood and "umble" no doubt he will be with his relative by marriage just now, and yet—for all the Law's righteous and somewhat frothy indignation—John Jerry found a Counsel to defend him! "The case was one of those calamities which throw great disgrace on the whole building trade of this country," but the Law has clean hands even when they are not "briefless." A little less of this posing on pedestal is really wanted in our Courts. There are so many "attacks" of virtue.

ARCHITECTURE AT THE ACADEMY.

CONCLUDING NOTICE BY OUR SPECIAL REPRESENTATIVE.

WITH SKETCHES BY C. E. MALLOWS.

THE coloured design (No. 1,419) for the New Reredos in Manchester Cathedral, by Mr. Basil Champneys, will not enhance his reputation. The figures are the best part of the design, and are, we believe, by Mr. Frampton, A.R.A. These are, of course, admirable, and probably the effect of the whole Reredos would be better in execution than this drawing suggests.

We do not know, for certain, of what material Mr. Champneys intends to build his "Proposed West Front" for the same Cathedral (No. 1,455), but the drawing suggests cast iron.



Mr. Ernest Newton's "House at Sutton, Coldfield," drawings Nos. 1,411 and 1,421, the first the Entrance and the other the Garden Front, is a most delightful design of a homely and inviting-looking country house, but is very inadequately illustrated by the unsigned pen drawings. This Garden Front is admirably composed, and has a nice feature in the plainly treated covered Loggia. It is a pity this design is not better illustrated.

No. 1,410 is another case in point. If Mr. Breden's "Country House" had been better illustrated; there are many good points in the design which would have shown to much advantage. It has, nevertheless, much character and nice feeling in it as it is.

No. 1,430 is the "Lecture Hall of the Imperial Institute," illustrated in this issue. The pen drawing at the Academy is by Mr. Prentice.

No. 1,433 is a water-colour drawing, in a quiet tone, of "St. Saviour's Priory Chapel, at Haggerstone," by Mr. Chas. H. M. Mileham. It is in a somewhat severe type of Early Norman or Romanesque, with good colour decoration, successfully managed with the one exception of the barrel-vaulted roof. The zigzag effect of the blue colour is not very pleasant.

Mr. Wilson's third exhibit this year is the

"Design for Rood, All Hallows Church, Southwark" (No. 1,420), a most beautiful study in colour, but the three rectangular ends and the Crucifix seem a little heavy and out of scale with the rest of the work.

Nos. 1,422 and 1,431, very much skied, possibly because they are slight drawings, illustrate portions of the "s.s. Tantallan Castle," by Messrs. Niven and Wigglesworth.

Mr. Horace Field in No. 1,438 has produced a very successful type of Georgian work for the Hampstead Central Public Library, with a semi-circular headed Entrance Door in stone, and balcony over. It is mainly of red bricks with stone quoins at the angles, and stone, cornice with modillions to eaves. The two semi-circular bay windows to the Side Elevations are well and effectively designed.

No. 1,432, a design for "The Sutton Public Offices," by Mr. Searles Wood, is not very interesting either as a drawing or design. No. 1,427 hangs below and is "The Passmore Edwards Free Library, Uxbridge Road, Hammersmith," designed and drawn by Mr. Maurice B. Adams, F.R.I.B.A.

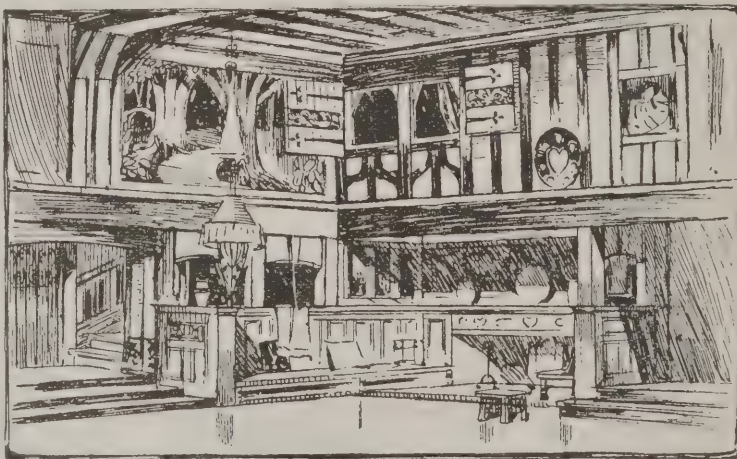
We like the Interior of the "New Chapel of St. Peter's College, Radley," by Mr. T. G. Jackson, A.R.A. (1,434), designed in a florid type of Gothic with German feeling. The drawing is not a very successful interpretation of the design.

The Interior of "Ashorne Hill House" (No. 1,435), by Mr. E. Goldie, has something attractive about it, especially the way in which the open Arcade and Gallery are managed at the sides and far end, but we cannot admire the ill-proportioned and characterless Chimney-Piece, out of scale and harmony with the other parts. The pen drawing is by Mr. H. W. Brewer.

There is much style in the way Mr. John Begg has drawn "Earlshall," Fife (No. 1,446), for Mr. Robert S. Lorimer. The "Pleasant" and the quaint old Scotch house is very well treated. One would look forward with delight to a summer's holiday at such a place as this.

Mr. Mileham's laboured water-colour drawing does not adequately illustrate his design for the "Chapel and suggested Screen for S. Albans, Holborn" (No. 1,445); nor is there much originality in No. 1,448, which is a design for an Organ Case, by Mr. A. E. Perkins.

No. 1,443, Mr. C. H. Mileham illustrates his design for proposed new Chapel and other buildings at S. Saviour's Priory, Haggerstone



It is fully explained by two water-colour views and plans. The drawings, a little blurred in effect, and wanting in precision and freshness of colour, show an able design in red brick and stone (principally the former), and a large amount of plain wall space in the view from

Little Cambridge Street, and a long low porch with a pan-tiled roof supported by short Doric columns, without bases, in the view from the Priory. The whole general effect is rather un-English, and more what would be seen in some quiet Italian town than in prosaic Haggerstone.

We like Mr. F. A. Walters' "Church at Petworth, Sussex" (No. 1,449), much better than his other exhibit on the opposite wall.

"Rotherhithe Town Hall," the accepted design (No. 1,450), which has been already published, and is consequently well-known, is by Messrs. Murray & Foster, and has good points but not much originality, and savours a little too much of the *Ecole des Beaux Arts* to suit English tastes. The Entrance Porch with the attenuated figures supporting the stone balcony over, is the most unsatisfactory part of the design, and we should hope will be reconsidered. Mr. Arnold Taylor's "Public Library at Hampstead" (No. 1,459), does not present much for comment, and would be more satisfactory in execution if the Architecture expressed better the public character of the building. The "Rebuilding of All Saints Church, Hertford," by Messrs. Paley, Austin & Paley (No. 1,464), is doubtless carried out in a thoroughly conservative spirit, but the pen drawing (by Mr. Austin), is hung too high to properly judge. (No. 1,465), "Shireoak Headingley," by Mr. Francis W. Bedford, suffers from the same cause, but it appears to be designed and drawn by the Architect in excellent taste and feeling. Messrs. Niven & Wigglesworth's House "Tieth View near Donne, N.B." (No. 1,466), is a little too quaintly clever to be pleasing, but the garden front redeems the rest of the design, which could, with a little alteration, be made interesting. We take strong exception to the way in which the entrance doorway butts into the bay window, and should hope the Architects will never seriously think of building it that way.

A very successful design is No. 1,471, "New Front Offices, Uttoxeter, Staffordshire." The Ground Floor is designed with an Ionic order, the entrance door being placed in the centre and windows on either side; a long low window on the First Floor is finished by a plain blank plastered gable. The whole design is one which would be sure to attract attention on an A.A. tour. "A Garden Pavilion on the edge of a Lake," by David Kennedy (No. 1,472) is an elevational drawing in water colour, hopelessly skied, but by what can be made out, it seems to be designed under the French influence of Mr. James Fasnacht.

The Bedford Court Mansions (No. 1,475) is by Mr. Vigers, and a severe treatment in brick and stone of a block of buildings at the corner of a street, with a projecting bay window at the angle. The design is successful mainly from its simplicity of treatment. The drawing is by Mr. Gerald Horsley.

No. 1,456 is a series of seven designs for stained glass windows, by Mr. Henry Haliday, for the Apse of Gracechurch, Utica. Harmonious arrangements of colours with well drawn figures. No. 1,470 is by the same artist and is a design for the East Window of the Church of St. Luke's Hospital, New York, and the subject "Christ the Consoler."

There is no reason why No. 1,473 should

have been hung, it can claim no merit either as a drawing or design—it is inoffensive and that is the best that can be said for it. Mr. Hall Caine's House at Peel, Isle of Man (No. 1,457), by Messrs. Scott and Morris, does not very well express its purpose as an entrance to a private home. The large semi-circular doorway is somewhat inspired by Richardson, but we doubt if Richardson would have treated a private entrance quite in this way. It would be admirable for Public Halls, or perhaps better still, as an Entrance to a Crypt or a Church but the Architects have lost the domestic character altogether. Otherwise it is bold and suggestive both in design and drawing, and at once arrests attention.

Messrs. P. H. Tree and Ivor S. Price have in No. 1,476 an excellent design, illustrated by Mr. Price, of small Cottages at Ninfield, Sussex. There is much nice feeling in this drawing.

Mr. Voysey's design for Walnut Tree Farm, (1,496), is another example of artistic domestic work. It is daintily illustrated by Mr. Davison. The effect of the long low lines of the Front with the four gables at one end is very good, and the lonely appearance of the whole design is excellent.

Mr. Andrew N. Prentice shows in 1,499, the Interior of a Dutch Library at Glasgow, which



is more remarkable for the clever handling of the neater colour drawing than for the design.

Another design in colour is by Mr. Belcher, of a Country House "Bearoc," Berkshire. (No. 1,504). The merits of this work, artistically and cleverly drawn as it is in elevation, would have been better explained by perspective views.

There are fine lines and good colouring in No. 1,479, Mr. Patten Wilson's design for "Panel in Frieze." The arrangement of the kneeling figure in blue against the green flowing lines of the background is most artistic, and shows much power of invention.

Other exhibits remaining worthy of remark, No. 1,409, (the first on the Catalogue), is a "Sketch Design for a Town House," by Mr. Frank B. Cooper, a tinted elevation in good colour of a design, in a quiet type of Renaissance, with a nicely treated recessed arched window to the Drawing Room on the first floor. The Grange Road Schools, Middlesborough, (No. 1,424), by Mr. J. Mitchell Bottomley, have some good points, but the design is in a somewhat crude type of English seventeenth century Renaissance, and moreover has received rather rough treatment in illustration by a weak and slovenly water colour drawing. We are glad to see Mr. Reginald Barrat exhibiting again with his lovely water-colour of a delightful piece of

Oriental Architecture, "The Mosque Door at Cairo" (No. 1,540).

Messrs. Cheston and Perkins have a very nice design (No. 1,528) for a Convalescent Home for the East London Hospital for Children, of which we now give a sketch of the Entrance Front, and Mr. Herbert L. Fedden has a charming little design for "The White Cottage, Caterham" (No. 1,535). There are many colour drawings showing schemes for stained glass windows of more or less merit, and amongst them are Mr. E. Frampton's, Nos. 1,531 and 1,547, the latter a design for Chancel Window Nottingham Parish Church. We note No. 1,440, "The Four Elements," a panel by Mr. Herrell; the North Transept Window of the Lichfield Cathedral, by Ward and Hughes; East Window, Radley College Chapel, by T. J. Grylls; "Industry" (No. 1,442), by W. J. Griffiths, and Nos. 1,447 and 1,542, the latter, "Decoration round Confessionals," by Thomas Grew; No. 1,477, "The Baptism," by William Arkman, and a Memorial Window (No. 1,481), by Stephen Adam. Messrs. Ion Pace, Shrigley and Hunt, George W. Ostrehan and Hubert C. Corlette (the latter from New College, Oxford), also contribute decorative designs in colour.

Mr. W. S. Weatherley sends a good pencil drawing by his own hands, illustrating his Church at Stanford-on-Soar, in which there is excellent work of a somewhat correct type. Mr. William L. Griffiths has a design for a Wesleyan Chapel (No. 1,436), which is far above the average of such buildings, and Mr. Cesare Formilli and Mr. James Boekbinder contribute some subjects of quite another character which should not be overlooked.

Mr. E. F. Bodley, A.R.A., has only one contribution this year, "The New Electric Organ, Burton-on-Trent." We should like to have seen some of his beautiful Church work well illustrated. It is, comparatively speaking, unknown in that respect. Sir Arthur Blomfield, A.R.A., has a similar subject in No. 1,429 for St.

Saviour's Church, Southwark, and Mr. Henry Skipworth, for S. Albans' Church, Teddington.

Messrs. Frank Baggallay & Bristowe send a view of the "Centre Hall and Pump Room, New Baths, Harrogate," which we remember they won in open competition some time ago. The "New Chancel of Edwalton Church" (No. 1,546), by Messrs. Brewill & Bailly, is designed on simple and good lines and illustrated by a pencil drawing in which tone and values have been studied. Messrs. Rogers, Bone & Cole show in No. 1,546, the Tower and Spire of Emmanuel Church, Plymouth, and Mr. Baker King the "New Chancel and Alterations to Nave, Christ Church, Southwark" (No. 1,516). Domestic work of some interest is contributed by Messrs. Huntly Gordon, who also sends a new drawing of an "Entrance Hall in Moorgate Street," T. B. Silcock, C. E. Sayer, C. J. Fergusson, John Cash, and Brightwen Binyon. The "Bishopsgate Institute," by Mr. C. Harrison Townsend, is a building admirably adapted to, and expressive of its purpose, and deserves more life-like illustration.

Messrs. J. L. Pearson, R.A., Reginald Blomfield, John Attwood Slater, W. R. Lethaby, Millard, T. MacLaren, E. W. Mountford, and many others are unfortunately not represented this year.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
June 4th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

At last the Victoria Embankment is open from end to end. It has been blocked in sections ever since the break up of the great frost, and its repair has been an exceptionally heavy undertaking. This road presents a surface of 48,000 square yards, and to keep it in repair costs on an average £3,000 a year, the responsibility for it devolving on the London County Council. Only so recently as the close of the year before last it was picked up from end to end and relaid with Macadam, but for a long time past complaint has been made of the spongy, unsatisfactory condition of the roadway. It was thought expedient, therefore, to have a thorough renovation. It has been "scarified" to a depth of eight inches over its entire surface, and in some places even to a greater depth. Many tons of rotten material—pulverised macadam—have been removed, and replaced by new metal. The whole of the road has in fact been completely remade, and a fine piece of work it appears to be. It has occasioned a serious interruption of traffic, but this has been inevitable. The blocking of the entire width of the road in sections, instead of keeping it partly open for traffic, has been necessitated by the use of the large number of steam rollers and "scarifiers" in use.

EMINENT clerics and ecclesiastics are not always apt in their remarks upon the true spirit of Art, but the Dean of Ely is an exception to the rule. In distributing the prizes and certificates gained by the students of the Tamworth and Glascote Science and Art Classes, the Dean said that the question of the restoration of the Sculpture work in the beautiful Lady Chapel of Ely Cathedral was at the present time creating much interest, and he had been asked why the authorities did not restore the beautiful figures, many of which had been defaced in Puritan times. Even if a millionaire offered to pay for the cost he should be sorry to see them interfered with, because he was conscious of the fact that there was no artist or sculptor in Europe at the present day who could restore the work, because the whole spirit of our work at the present day was totally different to the work of the 14th century. Art was an expression of a workman's joy in his work, and the reason they did not get good Art was because very few of the ordinary workmen got joy out of their work. Their work was solely for the weekly wage, and they wanted to do everything on the cheap, always thinking of what they could do in return.

THAT latest established of Art organisations, the Society of Women Painters, holds its first annual Exhibition at the Hanover

Gallery in Bond Street. The collection which has been got together for the occasion is a fairly creditable one. Some of the works display much originality and cleverness, and there is a pleasing absence of the merely meretricious or eccentric. A notable feature is the series of pencil sketches of public men which the Marchioness of Granby contributes. These vary somewhat in quality, but they are all marked by directness and sincerity.

For the support of English Archæologists in Greece, the Prince of Wales has consented to preside at a meeting in St. James's Palace some time during the season. The Archæological Schools of other countries, France, Germany, and America, receive support from their Governments, but this is not the case with the English School. The money which is required does not amount to a very large sum, and should be easily subscribed.

MR. PEARSON, R.A., who is advising the Dean and Chapter of Peterborough, gives a lamentable account of the condition of the noble West Front of the Cathedral. Until a scaffolding can be got up, the extent of the repairs which are urgently needed cannot be estimated, but it is clear that a large amount of work must be done if a great calamity is to be averted. "Not only is the stone," writes Mr. Pearson, "in numberless prominent places very much decayed, but the mortar in the beds and joints has come out to a considerable depth, and, but for some iron cramps—also much decayed—the tops of all the pinnacles would in all probability have been thrown down." It was not only the great gale that was responsible for the mischief; centuries of English winters, with their sudden and violent moods, have also played havoc with masonry and joints. The Restoration Committee has taken immediate steps to issue an appeal for funds, so that the Pinnacles and Spires on the Towers of the West Front may be made secure, together with the remaining portions. Peterborough Cathedral should be preserved at whatever cost.

NUMEROUS improvements in the sanitary arrangements of the Guards' Barracks in London have recently been carried out or are now in progress. These improvements have been undertaken in consequence of representations made by the medical officers in charge of the various Barracks in their weekly reports. Many of the sanitary appliances and arrangements are, or until recently have been, such as have been rendered obsolete by the advance of Sanitary Science; but there is every intention on the part of the authorities to render the Barracks in London as complete and perfect as possible in sanitary matters.

THE New British Art Gallery, to be presented to the nation by Mr. Tate, is rapidly rising on the ground formerly occupied by Millbank Penitentiary. It was commenced last October twelvemonths, and already the structure has attained to something above the main floor level. Only the central portion of the new Gallery will have more than a ground floor, so that a great part of the building is rapidly approaching its full height. The Main Front to the Embankment is 280 feet in length, and already it gives promise of being an imposing piece of work. It is to cost £80,000, and though it will be quite a complete institution in itself, the Architect, Mr. Sydney Smith, has, in accordance with the stipulations of the donor, so arranged that it will admit of extension hereafter. At the commencement it was estimated that about four years would be required for its completion. It is now thought that another eighteen months or two years will be sufficient for the work.

THE New Post Office, Stirling, built on the site of the old structure, has occupied fully eighteen months in construction, and has cost nearly £6,000. It is commodious, well lighted, and fitted up with every convenience for the comfort of the officials and employees, and for the rapid dispatch of public business. The building consists of two storeys and sunk flat, and on the ground floor is the Public Office, with counter extending to 34 feet, and the Postmaster's Room, behind these being the Sorting Room, 43 feet by 36 feet. The Instrument Room is on the second floor, and is 21 feet by 33 feet. Retiring Rooms are also provided. Mr. M'Pherson, Stirling, was the contractor for the erection of the building.

THE Surveyor's Institution held its annual general meeting at 12, Great George Street, Westminster, Mr. Daniel Watney, the new president, in the chair. The report showed that there were now 2,367 members, and four fellows had been elected during the year. Three representatives of the Society appeared before the Hybrid Committee of the House of Commons to oppose the London Streets and Buildings Bill, and succeeded in greatly modifying some main features of the measure. It is too much to look for finality in an Act of so complicated a character, but as it stands it may be regarded as a very successful attempt at the codination and amendment of previous Acts, and is likely to be of great benefit to the Metropolis. Mr. A. Harston moved, and Mr. G. Kemsley seconded, the adoption of the report and balance-sheet, a motion which was carried unanimously. Mr. J. H. Sabin thanked the Auditors for their past services, and a similar compliment was paid to the President, Vice-President and the Council. The Institution Prize was then presented to Mr. Herbert John Watson, the Penfold Silver Medal was given to Mr. Hugh Major Messenger, and the Penfold Gold Medal was awarded to Mr. Theodore Gervase Chambers. The Crawford Prize went to Mr. Cyril Frood Vale Davies.

To those who saw the ground at Earl's Court six months ago, the transformation is simply marvellous. It was at that time filled with the ruins of played-out undertakings, and had its surface churned up into a perfect sea of puddle. But since then the builder and landscape gardener have worked wonders—picturesque edifices, domes, colonnades, and waterways being features of the new show. Buffalo Bill's once famous arena has disappeared, and the lake of Captain Boyton has shared its fate. In place of these, however, is a dainty Court surrounded by fine samples of Indian Architecture. Within these buildings are to be found exquisite specimens of Oriental workmanship—some in metals, some in statuary, many in cutlery, and others again in the shape of Pictorial Art. Taking the whole series of Exhibitions—right away from the fisheries at South Kensington—we have had nothing half so pretty as the white-fronted facades of these Eastern dwellings at Earl's Court. Though "the Queen's Palace," with its attractive collections, is sure to bid high for popular favour, there are other spots that ought to be equally appreciated. The vast interior of the "Empress Theatre" is still incomplete, and cannot be properly judged.

BURY ST. EDMUND'S New Post Office, recently erected on the Cornhill, where it occupies a commanding position, has been opened for the transaction of business. The large block of buildings has a handsome frontage of red brick, with imposing stone dressings, and the carving includes the Royal Arms on the top gable. There are two stories and a basement. The premises extend back into St. Andrew's Street, adjacent to which thoroughfare there is a yard where

the mail carts arrive and depart. On the ground floor of the Cornhill structure is the public Post Office, a lofty, well-lighted apartment, 27 feet by 25 feet. On the outside of the counter the floor is of red Ruabon tile, and around is a coloured glazed dado. Behind the counter, and elsewhere in the building, the flooring is of wood brick, supplied by Messrs. Roger Lowe & Co., of Bolton. Immediately in the rear of the public office is the office of the postmaster, and in close proximity is the office of the chief clerk. Both apartments are close to the lofty, well-ventilated Sorting Room, 63 feet by 26 feet, having six skylights. This office leads through double doors into a granolithic-paved yard, and thence through a wide gateway into St. Andrew's Street (South). There is a Retiring Room for postmen. On the first floor, directly



DESIGN FOR A BOOK COVER, BY
A. A. TURBAYNE.

over the public office, is the Telegraph Instrument Room, of the same size, and there is a Retiring Room for male clerks, and also for telegraph messengers. The second floor consists of the female clerks' Retiring Room, with the caretaker's apartments, Storeroom, and Battery Room. Mr. H. Tanner, of H.M. Office of Works, was the Architect, and Messrs. Everett & Sons, of Colchester, were the contractors.

FROM the annual report of the Committee of the American School of Classical Studies, at Athens, it appears that among the most interesting results of the excavations during the period dealt with, was the discovery of beehive Tombs of the Mycenaean period, one of which contained more than forty vases in perfect preservation, besides terra-cotta figurines, and other objects. A communication from Athens states that at the beginning of this month, the excavations now being conducted at Eleusis by the Archaeological Society brought to light a pinax of terra-cotta of much importance. It is a work of Art of the fourth century before Christ, from the hand of a master. On it are painted four female figures, and the colours are wonderfully preserved.

ST. MARGARET'S CHURCH, Olton, which, after its enlargement, will consist of Transepts, Nave, and Side Aisles, will give sitting accommodation for 464 adults. A new Choir Vestry will also be built at side of South Transept. The plan is so arranged that a Tower may be erected upon the south side, and also Porches upon the north and west sides. The total length of the Nave is 75 feet, the width (including Side Aisles) is 49 feet, and the height from the ground to apex of roof is 42 feet. The walls are being faced on the outside with Codsall stone and finished with Bath stone dressings; the inside walls will be built with brick and finished with stucco; a dado of red brick is built round the lower part of the walls inside. The roofs are constructed with open-framed timber work and covered with tiles. The cost of works in hand, including seating, lighting, and warming will be about £3,000, the half of which sum has yet to be collected. The work is being carried out under the supervision of Mr. B. Corser,

Architect, of Birmingham, by Messrs. H. Willcock & Co., Contractors, Wolverhampton.

FROM the mahogany forests of Africa it is said that 12,000,000 feet of lumber have already been cut and exported, and they promise to yield an immense revenue to the British and French colonists who have seized upon the territory. The wood has a tinge of pink in contrast to the somewhat reddish colour of the American variety, and some of the squared logs which have been imported are 2 by 3½ feet in size. Some of this African mahogany is the wood of Khaya senegalensis, a tree which belongs to the same family as the true mahogany, and is closely related to it. It is not so desirable a cabinet wood as the Mexican or Cuban mahogany, but is more like the Central American wood.

THE India Office has ordered from a firm of granite merchants in Aberdeen a large Monumental Obelisk to be erected at Manipur in memory of the officers who were murdered there four years ago. The Monument, which will comprise 170 pieces of Aberdeenshire granite, will weigh 70 tons, and when set up will bear the following inscription: "The Government of India have caused this Monument to be erected to mark the spot where rest the remains of the British officers who were murdered at Manipur in 1891."

PRACTICAL effect has just been given to the movement for providing a superior class of workmen's dwellings in France by the official opening of a new Model Village at Athis, ten or twelve miles from Paris, on the Orleans Railway. The group of houses in question, to which the name of "Cottage d'Athis" has been given, is the first undertaking carried out under a recent Act for enabling workmen to obtain houses in the country, either as tenants or owners, under very favourable conditions. In this case the Orleans Railway Company offered special advantages, not only by allotting a plot of land on very easy terms, but by advancing a sum of £6,000 to a Co-operative Society of their workpeople to enable them to build their own dwellings. The name "cottage," which to English ears has an odd sound as a collective word, was given to the Village, because it suggests "the happy and the picturesque, and a home in the country where a man may live in peace and comfort with his wife and children." The new Village seems to realise the intentions of the promoters. At present it only includes 19 houses, with a population of 63 persons; but more houses are in course of construction, and there seems to be a great demand for them. The cost of building has varied from £160 to £300 and the annual rent from £3 to £12, but the tenancy is, of course, confined to the members of the directing Co-operative Society. The Cottages are of picturesque design.

LLEWELLYN AP GRIFFYD, the last of the native Princes of Wales, is to have a monument. With regard to the place and form of the memorial, some difference of opinion prevails. It is believed that Llewellyn was buried in 1282 in the Abbey of Cwm Hir, Radnorshire, and one proposal is to erect a stately tomb to his memory in the Abbey. Some subscribers think that first of all excavations should be made in the Abbey with a view of finding, if possible, the exact spot in which the remains rest. The excavation work, has, indeed, been decided on, and will be carried out under the supervision of a body composed of representatives of the Memorial Committee, the Cambrian Archaeological Association, and the Cymmrodorion Society.

SOME successful experiments have been completed by the London Council in regard to the filtration of sewage effluent, which

will be of value to authorities having to deal with the purification of sewage. Experiments have been made through various media by means of filters at Barking outfall, with the result that coke-breeze has been found to be most effective. An average quantity of a million gallons of effluent per day per acre, is being purified to such a degree as to remove odour, colour, and liability to putrefaction.

CARDINAL VAUGHAN will lay the foundation stone of the Westminster Roman Catholic Cathedral, on the site close to Archbishop's House, Westminster, at eleven o'clock in the forenoon of Saturday, June 29th, the Feast of the Apostles SS. Peter and Paul. Associated in the ceremony with his Eminence will be Cardinal Logue, Roman Catholic Primate of All Ireland, who has accepted Cardinal Vaughan's invitation to be present. Invitations have also been sent to all the members of the Hierarchy in this country, and to the clergy of the old London district, now forming the Westminster, Southwark, and Portsmouth dioceses.

THE New Volunteer Memorial at Exeter, which stands just outside the walls on the site of the Saxon Castle—the last stronghold in the country to give in to the conquering William in 1066—was designed by Mr. Sidney K. Greenslade, of University Chambers, Gordon Square, London, a native of Exeter.



NEW VOLUNTEER MEMORIAL, EXETER,
DESIGNED BY S. K. GREENSLADE, A.R.I.B.A.,
EXECUTED BY HARRY HEMS AND SONS.

The work itself was carried out by Messrs. Harry Hems and Sons, of Exeter. The approaches and base of the Memorial are of grey granite, quarried from the Tors, close by the convict prison at Princetown. All above (save the inscription tablets and the medallion bust, which are in hard Sicilian marble) is in Portland stone. Rising to a height of nearly 25 ft., the outline of the Memorial is graceful and strong. Above the

marble tablet the structure tapers considerably, the fluted column being surmounted by a Royal crown in the solid stone.

GUISELEY is to have a new Wesleyan Chapel, and the foundation stones have been laid. The new building, which is to take the place of a Chapel built in 1814, and enlarged in 1834, occupies a commanding position, with a south aspect, the ground sloping towards the road. The style of Architecture is Decorated Gothic. The Chapel will comprise Nave, Chancel and Transepts, giving an accommodation of 509 on the ground floor, whilst 200 more will be accommodated in three small Galleries. At the south-west corner, a Tower and Spire will rise to a height of 100 feet. The Chancel, which will be lighted by a tracery window at each side, and a "Rose" window in the Gable will contain the organ and the choir. All the windows will have stone tracery heads, filled with stained glass. The outside walls will be faced with pitch-faced delph stones, relieved with Ashlar dressings of Guiseley sandstone, and the roof covered with green Westmoreland slates with red tile ridge. All woodwork will be of pitch pine. The ceiling of Nave will be trefoil, the lower arch being plastered in between the wood ribs, and the upper arch and whole of the Chancel ceiling of wood, divided into panels by ribs and the arch roof trusses. Messrs. Walker & Collinson, of Bradford, are the Architects. The contracts, which amount to £3,792, have been let to the following firms: S. Mounsey & Sons, masons, Guiseley; Jas. Deacon, joiner, Shipley; Edwin Lee, plumber, Guiseley; Andrew Firth, plasterer, Graddon; John Smithies, slater, Gt. Horton; Bilton & Bowdon, painters, Guiseley. The whole cost, including site and Architects' fees will be over £5,000, and towards this, prior to the ceremony on Saturday, £3,200 had been raised.

WHILST the workmen were levelling the land on the north side of the Market Place and the Free Library at Preston, the remains of three draw wells were discovered. There is a record of the Corporation having ordered, in 1654, a "draw well" to be made "in the bottome of the Market Stedd," and in 1666 another well was sunk in Fishergate. About 40 years ago, workmen employed in excavating in Church Street, found an ancient well a little to the south of Water Street. One of the upper stones bore the date 1664, and was inscribed with the name of the Mayor of that year. Towards the end of the 17th century, Molyneux Square—formerly a part of Lancaster Road—was described by Dr. Kuerdon as having "a draw well in the midst thereof." Pumps were afterwards erected in various parts of the town, and it is only in comparatively recent years that they have been abolished. The district seems noted for its legends and discoveries of subterranean vaults and passages. There is supposed to be one connecting the ancient Abbeys of Whalley and Sawley.

MR. W. B. RICHMOND, A.R.A., spoke of his work on the "Decoration of St. Paul's" before a meeting of the Applied Art Section of the Society of Arts the other evening. The Dean of St. Paul's was in the chair. Professor Richmond said a century ago the Bishop of London, approached as to decoration, made answer that nothing would induce him to sanction the conversion of Protestant St. Paul's to the Romish Church. Hence the Cathedral remained an example of the dulness of Protestantism and an evidence that England was not ready for the remarriage of Religion and Art. But time brought a change in the manner in which such things were regarded, and it was considered that St. Paul's should be decorated in accordance with the

ideas of Sir Christopher Wren. When he was asked to prepare a scheme of decoration for the Choir, he felt that the only material for such decoration was mosaic, because principally, it could be washed without injury—an absolutely necessary condition in the smoky London atmosphere. Further, he considered that the designs should be such as were used during the time of the Byzantine Empire; that the work should be carried out by English—not Italian—labour; and that the work should be, if possible, carried out on the spot where it was to remain—under the light and conditions of its environment. The paper described at length how the English workmen were educated up to an appreciation of the Art. Speaking of the first two spandriis, Professor Richmond said he had not used sufficient strength in his outlines; he had used his white too liberally, the consequence being that the half tones were too narrow on account of the liberal expansion of white. He hoped, however, that this had been put right in his later efforts. One thing he trusted, and that was by his work and methods he had killed for ever paper mosaic in England.

THE 40 ft. scaling ladders and the pent-house for covering 100 men, which have been discovered in Chitral, and were intended by Sher Afzul as engines for the final assault and sack of Chitral Fort, ought to be taken to pieces, carefully numbered, and despatched at once to the Empire of India Exhibition in London. They would be the attraction.

AN unpretentious red brick and tile building, with half-timbered gables, situated close to Wallasey Station, near Liverpool, and standing in its own ground of rather more than an acre, has been provided by Mr. James Samuelson as a permanent "Camp" for girls. The main room is the Dormitory, an airy and well-lighted apartment 52 feet 6 inches long by 16 feet 6 inches wide. In this there is accommodation at present for twenty-four girls, but a dozen more can be provided for. There is a Dining-Hall 23 feet 6 inches by 16 feet 6 inches, the Matron's Room, and a Kitchen with a fine range and ovens. There is also full accommodation in the way of Lavatories and Baths. The building has been erected by Mr. James Merritt, Birkenhead, to the plans of Mr. R. G. Sykes, Liverpool.

THERE is to be no buying up of existing electric light companies on the part of the Newcastle Corporation. The Electric Light Committee has carefully considered Professor Kennedy's recent report, and has come to the conclusion that it cannot recommend the Council to purchase existing rights. While they have taken this action, however, the members of the Committee have not abandoned the idea of a corporate electric light supply. There are other towns where electric lighting companies exist, and where the Corporations still produce electricity on behalf of the public lighting of the streets. There are portions of towns that companies have refused to take up, and the Corporations have stepped in and given the supply themselves. How these ventures have succeeded is not stated, but the Town Clerk of Newcastle has been instructed to make inquiries on the matter, and the Committee will afterwards consider the advisability of getting the Council to apply for powers to provide an independent supply. The Committee pays something like £14,000 per annum to the Gas Company alone for lighting, and this in itself, it is contended, would furnish a large return for money expended to begin with.

MEMBERS of the Association of Sanitary Inspectors visit Worthing this Whitsuntide, on the occasion of their provisional meeting

and conference. On Saturday there was a conference at which papers were read by Alderman Cortis, Chairman of the local Sanitary Committee, on "The Dwellings of the Poor;" Dr. Charles Kelly, the Medical Officer for West Sussex, on "Death Rates;" Mr. C. T. Gardner, Sanitary Inspector of Worthing, on "The Sanitary History of Worthing;" and by Mr. W. W. West, the Vice-Chairman of the Council of the Association, on "The Sanitary Inspectors' Association: a review and a forecast."

In the Hall of the Barbers' Company is a painting, alleged to be by Holbein, representing Henry VIII. presenting a charter to the Court of Barber-Surgeons, and among the portraits are several of the leading members of the fraternity in the City at that time. A rumour is abroad that the Guild is about to turn it into cash, the price they set upon it being given at £15,000. The picture is essentially part and parcel of the ancient history of the City of London, and it would be a thousand pities if so interesting and valuable a work of Art were allowed to find a future home, say, in America, or in some collector's residence.

A BLOCK of buildings now being erected on the site of the old Bruce Academy in the Haymarket, Newcastle, is being pushed forward rapidly by the contractor (Mr. Walter Scott) and will no doubt be completed shortly. On the front of the building, facing the Haymarket, a stone niche, with canopy above, and an ornamental tablet below, has been inserted. In the niche is to be placed a statue of the late venerable Dr. Bruce, and the tablet is to record the fact that the new building stands upon the site of the famous Academy at which many distinguished Novocastrians received a goodly portion of their education. Bruce's Academy was at one time regarded as the scholastic institution of the town.

ART students in the National Gallery have been puzzled of late to find the large Raphael Room upside down. A most unsightly erection—a kind of palisade—has been put up in the centre of the room, hiding the Ansidei Madonna and cutting off all the centre of the floor. We hear that this room within a room has been put up in order to facilitate the proceedings of a firm of foreign photographers. In the interests of other visitors to the Gallery, these proceedings should not be lengthy; but as the palisade has been painted, it looks as if it had come to stay some time. Perhaps it would be well to say again that the National Gallery is a public institution not a private speculation ground. By the way, the National Gallery made several purchases at the Cliefden sale, and probably, through employing two agents instead of bidding directly, obtained what they required at a moderate price. We are glad to note that the new director is not confining his attentions to Foreign Art, but is filling up the gaps of our National Artists—even those of the second rank, such as Stubbs and Herbert Pugh. The picture of St. Paul's, Covent Garden, by the last-named, which has been acquired, is interesting not only topographically but because it is the view from the Artist's house, he having lived and died (from drink) in the Piazzas. Probably his remains are somewhere in the graveyard of this very Church, where Girtin and other Artists also sleep.

THE month of culture at Edinburgh, called "The Edinburgh Summer Meeting," which now almost rivals the Extension retreats at Oxford or Cambridge, begins this year on August 5th and closes with the end of the month. The programme includes lectures on Social Science and Philosophy, History, Literature, Philology, Hygiene, Biology,

Geography, Geology, Chemistry, Civics, Sloyd, and Fine Art. Among the lecturers are Professor Geddes, Mr. William Sharp, Mr. Arthur Thomson (all concerned with the "Scotch Renaissance") Professor Haddon, Professor Lloyd Morgan, Dr. Nicol, and others.

THE Walton New National Schools, Liverpool, are arranged to accommodate 324 boys on the ground floor and 324 girls on the upper floor—648 in all. Each department is arranged in five large Rooms, divided by glazed Screens, by the sliding of which three of the largest rooms can be thrown into one at any time for public gatherings or examinations. Every part is particularly well lighted, according to the best system for School work, and the teachers not only have perfect supervision of the Rooms but of the Entrances and Cloak Rooms also. The ventilation and warming have been carefully carried out, open fires and hot water pipes having been used in combination. The plans were selected in a limited competition, in which Mr. Hance, of the Liverpool School Board, was referee; and Messrs. C. O. Ellison and Son, the architects.

ROSSLYN CHAPEL has been further beautified by the addition of two new Stained Glass Windows. In 1887 the late Earl of Rosslyn filled in the centre of the Clerestory windows on the north side with a figure of St. George and the Dragon, in the memory of the late Mr. Andrew Kerr, Architect, who superintended the building of the Baptistery, and other work connected with the Castle. At the same time, by his Lordship's kind permission, the centre window on the south side was filled in by Mr. W. Mitchell, S.S.C., the then tenant of Rosebank, with a representation of St. Michael, as a thank-offering from himself and Mrs. Mitchell. It was understood at the time that these two subjects formed part of a series with which

Lord Rosslyn intended to fill all the Clerestory windows, after the suggestion and design of Messrs. Clayton and Bell, of London; those on the north side consisting of Christian warriors, and those on the south Old Testament warriors. As stated above, St. George, soldier and martyr in Nicodemia, fourth century, patron of England, forms the centre subject on the north side. There have now been added on the left of this St. Longinus, soldier and martyr in Cappadocia, fourth century; and on the right St. Maurice, soldier of the Theban Legion, who was martyred with others in 286. The former is given by Blanche, Countess of Rosslyn, in memory of her beloved husband, Francis Robert, fourth Earl of Rosslyn; the latter by her Grace the Duchess of Sutherland in memory of her father, the late Earl. It is needless to say these windows add very much to the beauty of this unique Architectural gem.

THE new organ for St. George's, Hanover Square, London, is constructed on the modern electric principle. The arrangement of the electric organ is already pretty well known, but it may be briefly described. It

consists of an electric key-board, communicating with the organ by means of wires forming a single cable, and of an ingenious system for the production of sound in the organ itself. The organ pipes stand on wind boxes, which are automatically filled by the action of a nicely-adjusted valve. This valve responds to the slightest touch of the key, so that immediately a note is struck there is a rush of air, which, striking suddenly on the lip of the pipe, emits a full round tone. One of the advantages of the system is that the keyboard may be situated at almost any distance from the organ. In the case of St. George's it is in the Chancel, at the opposite end of the Church to that in which the instrument is placed. It occupies no more space than an ordinary chamber organ, and it may be moved about from place to place as the exigencies of the Church may require. In point of tone these electric organs leave little to be desired. It is claimed for them, indeed, that they are superior in this respect to instruments constructed on the old system.

It was recently ascertained that the Tower of Darrington Church, about four miles from Pontefract, had suffered some damage during

a great store of documents relating to the titled families of France. The Marquis de Magny, the compiler of the "Livres d'Or de la Noblesse de France," founded it in 1841, professedly in order to continue the work of the genealogists of the 18th century. But the new generation of Frenchmen care little for tables of precedence, and what Carlyle called "Tom Fool titles," so that the whole concern is going for what it will fetch. Upwards of 40,000 genealogical trees and 400,000 original documents upon parchment or paper were submitted at the sale.

PROGRESS is being made with the erection of the extensive block of offices for the West Riding County Council at Wakefield. As the pile of buildings gradually rises, the design of the structure, by Messrs. Gibson & Russell, of Little Queen Street, Westminster, is much admired. The cost of the buildings will be about £80,000.

A PULPIT of Caen stone has been erected in St. George's Church, Birmingham, to the memory of the Rev. J. W. Mills. The Architect, Mr. A. Edwards, designed a very handsome pulpit, which has been made by Messrs. Thomson & Co., at a cost of about £100. The pulpit is of octagonal shape,

relieved with open tracery and carved foliage, and stands on a panelled column springing from a moulded base.

MEDALS of Honour have been awarded by the Society of French Artists exhibiting in the Salon of the Champs-Élysées to M. Ernest Hébert, Painter; M. Bartholdi, Sculptor; and M. Baude, the Wood Engraver. The Jury of the Champs-Élysées Salon has decreed some of the honours of the year. No first-class medals were given for Painting. M. Sorolla y Bastida, M. Ravanne, M. Paul Lecomte, and M. Simonnet were among the recipients of medals of the second class. M. Gauquie, Sculptor, obtained

the only first-class medal given in his department. The Architects fared as badly as the Painters, none of the candidates for first-class medals having obtained a sufficient number of votes to entitle them to the honour of such an award.

AMERICAN engineers seem to be agreed that steam railways are doomed, and that the recent development of electric railways is beginning to revolutionise travel. The steam railways are finding it difficult to compete with the electric trolley lines over large parts of New England. An electric line is also projected to connect Haverhill, in Massachusetts, with Quebec, in Canada, a distance of 280 miles. The Cincinnati, Hamilton, and Dayton Railway, is about to substitute electricity for steam power. The competition of the electric trolley lines has brought down the fares on the Philadelphia and Reading, and is expected to do so on the Pennsylvania Railway. And, finally, the Inter-Oceanic Electric Railway, has been incorporated in Illinois with a capital of 200,000,000 dols. It will construct an elevated electric railway between Chicago and New York.



the winter gales. The foundations were carefully examined, when it was found that under the west side of the Tower, only about a foot deep from the surface, the body of a man had been placed in a sort of bed in the solid rock, and the west wall was actually resting upon his skull. The gentle vibration of the Tower had opened the sutures in the skull, and caused a crack of about two and a-half inches long. The grave must have been prepared and the wall placed with deliberate intention upon the head of the person buried; and this was done with such care and art that all remained as placed for at least six hundred years, till in fact the storm of December last found out the weak place. The place can still be seen, being protected by a framework of bricks.

ONE of the most curious sales of modern times took place on Thursday at the Paris Mart, the Hôtel des Ventes in the Rue Drouot. The Heraldic College of France was put up by auction, together with all its archives. It is true that the institution was never anything but a private enterprise, but it has had an uninterrupted existence of more than half a century, and it has amassed

NOTICE.

OUR SPECIAL ISSUE.

The Firm of English Makers

Commissioned to supply us with the **Stiff Cover** for our **Special** and all future numbers have notified us that, owing to the stoppage of their mill, consequent upon the **Whitsuntide Holidays**, they are **unable to Deliver to Date**; we have, therefore, no option but to postpone the **Special Number** for one week.

Our Issue of JUNE 18th

Will mark a **Second Great Development of**

The Builders' Journal,

Which now possesses a

Larger Circulation

Than any other Architectural Journal published in this country.

This **Special Issue** will have all its inside pages **Printed on White Paper**. We have invited three of the best known **Pen and Ink Artists** to submit us designs for a **New Head Piece**, the best of which will embellish the issue. This number will be sent by Post to Every Architect, Surveyor, Borough, Diocesan and Ecclesiastical Surveyor, Clerk to the Local Board, in England, Ireland, Scotland and Wales. This, with the Publisher's ordinary Edition, will make the output close upon—

25,000 Copies.

COMPETITION AS TO FEES.

At the last meeting of the Ipswich Board of Guardians, the clerk read replies from Mr. Brightwen Binyon and Mr. W. Eade, local Architects, to whom he had written, in accordance with the resolution passed last week, asking each whether either would undertake to act as assessor of the six selected plans for the new Workhouse, and at what fee. Both declined to enter into a competition as to fees with Mr. Charles Barry, the Architect recommended by the Royal Institute of British Architects (of which both are members), but intimated that they would be willing to act jointly at a fee of 50 guineas. The Rev. T. W. Tozer said that was the only answer they could have expected from gentlemen, and moved that they be appointed as assessors at a fee of fifty guineas to cover everything. This was seconded by Mr. Lord. Mrs. Owen said the ground on which the resolution was carried was that about half the expense would be saved, and as the fee would be the same it would be better to have Mr. Barry, who was recommended by the President of the Institute of Architects, and was an Architect of great reputation. His travelling expenses could not be much. She moved that Mr. Barry be appointed. Mr. C. Borrett (a local builder) seconded this, and, on a show of hands, it was carried by 23 to 3.

The Builders' Journal.

MEN WHO BUILD.

No. 15.

HENRY LOUIS FLORENCE.



IF there is nothing inspiring, there is at least something refreshing in the fact that two centuries and a-half ago one could obtain from Gray's Inn Gardens a delightful and uninterrupted view of the rising ground of Highgate and Hampstead. Two centuries and a-half ago! But you do not dive back, even in soulful reverie, into the days of the *Tatler* and the *Spectator*, when Gray's Inn was in the zenith of its fame, and when Howell wrote from his beloved Venice to a friend in his equally beloved Inn, "I would I had you here with a wish, and you would not desire in haste to be at Gray's Inn, though I hold your walks to be the pleasantest place about London, and that you have there the choicest society." Sir Roger de Coverley, of immortal memory, is mentioned by Addison as walking on the terrace of Gray's Inn Gardens, "hemming twice or thrice to himself with great vigour, for he loves to clear his pipes in good air, and is not a little pleased with any one who takes notice of the strength which he still exerts in his morning hems." Jacob Tonson, the celebrated bookseller, had his shop under Gray's Inn Gateway: being succeeded by an equally notorious bookseller, Thomas Osborne to wit, who is oftener than once introduced in the "Dunciad." Pope made him contend for the prize among the booksellers, and prove the successful competitor:—

"Osborne, through perfect modesty o'ercome
Crowned with the guerden, walks contented home."

And yet Johnson in his life of Pope speaks of Osborne as a man entirely destitute of shame—without sense of any disgrace but that of poverty. So much for history. Men's reputations do not mellow like wine and Architecture. The toning propensity of years does wonders with the cup, it also works miracles with stone. Antiquity blinds us; the pen is not so heartless as it seems. Oftentimes we deem a thing is good because we have no heart to call it bad; self-satisfying, if a little false.

But memories of the old Inn—and there are a crowd of them—do not occupy your present thoughts. Though the sun is sweltering down upon the elms—the poor old soot-dyed elms which Bacon planted with his own hands, and under whose shadows he divined the purest of human pleasures the love of trees and grass and flowers and plants "that do best perfume the air,"—you escape into the shadows of Verulam Buildings, to chat with an Architectural dilettante—a modern man of pencil and polish, souled with old time influences, but garbed in the



orthodox monstrosities of the century. If one should talk under the glamour of Gray's Inn, of memories of early days, there were no limit to your retrospection, and so Mr. Florence starts with the happy moment wherein he snatched the Soane Medallion, with as fine and perfect a study as has ever secured the award. That was six-and-twenty years ago—half a life-time; and in the same year he won the Royal Academy Gold Medal, and in the year following, its



COOMBE FARM: H. L. FLORENCE, ARCHITECT.

Travelling Studentship. For twelve months he roamed through Italy sketching and studying all its most treasured works, and the number of very clever and earnest water-colour drawings he brought back with him, testified to the industry and perseverance of their author.

Henry Louis Florence is one of the few men who have been steadfast in the loves of their youth. He has studied and worked in the Italian spirit ever since he first made acquaintance with a drawing board, and although English practice offers but the rarest opportunity to work purely in sympathy with the Italian feeling, he has kept as close to its teachings as the fashion of the moment permitted. The two designs hanging upon the walls of his drawing office, and which gained him his first distinction, show this most clearly, and none of his later and

Lloyd's house in Delahay Street, Westminster; the Holborn Town Hall; New Library, Reception and Class Rooms for the Benchers of Gray's Inn; additions to Wood's Hotel, Furnival's Inn, the Paddington Baths, the London Joint Stock Bank at Paddington, and the Coburg Hotel, now being erected in Mount Street, on the Duke of Westminster's Grosvenor Estate. The greater number of these works have emanated from the firm of Isaacs & Florence, but although Mr. Florence does not say so, it is well known that while this connection lasted, the Designing and Drawing offices were under the sole supervision of himself. Indeed, Henry Florence invariably plans all his work and details his elevations with his own hands. Before he came to take any great interest in the work of the Institute, and as a member of its Council and Art

Mr. Florence was born to be an Architect; he has combined in his own individuality all the little accomplishments of manner which build, upon the attributes of draughtsman-ship, the mellowed man of practice, and those are what so many clever practitioners lack.

THE Zion Congregational Chapel, Attercliffe, Sheffield, was re-opened last week after complete renovation and decoration at the hands of the Sheffield Co-operative Painters' Society, the effect of the efforts of the decorators being highly satisfactory. In addition, the Organ, which has done good service since 1867, has been extended and rebuilt.

MAUCHLINE is to have a row of Cottage Homes built as a memorial to Burns, for aged poor people, who will be housed in them rent free. The Cottages will overlook the Moss-giel Farm.



R.A. GOLD MEDAL DESIGN FOR A THEATRE, BY H. L. FLORENCE.

executed work approach them in purity of detail. Mr. Florence knows how impossible it is to produce any adequate virtue of proportion, of scale, or of detail in the mammoth buildings demanded of present day Architects. He turns to a splendidly executed elevation of the Hotel Victoria—the largest of his works—which holds the pride of place in his own room—and laments the necessity of floors piled one on top of the other, as they are here; but then he can turn to the delightful sketches of Coombe Farm, Croydon, for Mr. Herbert Lloyd, for whose family Mr. Florence has erected many fine houses, and be satisfied that never a more charming resting house for a busy man has been erected in the shires these many years. To give a schedule of the works of Henry Louis Florence would be a big thing, but his best known are the Holborn Viaduct Hotel, the late Mr. Edward

Committee got into close quarters with the examinations, Mr. Florence did great good at the Association, and passed its chair with distinction. One remembers with much pleasure his suavity of manner, the little lisp intoned so pleasantly in his speech, the courteous demeanour, the utter lack of "side."

Upon a delightfully carved oak settle rest the complete set of drawings of the Mammoth Hotel, that was to have risen on the site of Her Majesty's Theatre, in the Haymarket. These drawings have re-crossed the Atlantic, and may now lie in the charming oblivion of Gray's Inn for the remainder of their days. One can but think how typical of life sets of Architectural drawings are. Those upon which most hours of toil are spent, and of which the greatest expectations are formed, oftentimes never get beyond the artist's signature in the corner. Ambitions many times get no riper than that.

STEPS have been taken to secure a suitable Primitive Methodist Chapel at St. Leonard's, in the Hastings circuit. Property valued at £900 has been purchased for a site, and the building will be erected at once.

THE six plans received from competing Architects for alterations in and additions to the Workhouse Infirmary at Scarborough, are to be sent to the Local Government Board for adjudication.

MR. HUMPHREY MINCHIN seems to be earning well-merited appreciation in the practice of his profession as an Engineer out in India. Although only 26 years of age, he has charge of the important Waterworks which are being constructed in the Madras Presidency at a cost of £150,000. Colonel J. Pennycuik, R.E., Chief Engineer of the Public Works Department, recently made an inspection of the works. His report states that the progress made and the manner in which the work is being done, reflects the highest credit on Mr. Minchin.

A MODERN GRAMMAR SCHOOL.

ONE of the two Grammar Schools to be built at Oldham, under the Hulme Trust, was opened by Earl Spencer on Thursday. The Schools have been built to accommodate 250 boys and 150 girls on a plot of land (about eight acres in extent). The buildings are placed on the crown of the hill, with the Front to the south-west, overlooking Manchester. The basement floor contains a Gymnasium, which will be used by both boys and girls, with Dressing Rooms for each, a Workshop for the boys, and a Recreation Room for the girls; separate Dining Rooms are provided, and drying stoves for wet clothing, fitted up with radial horses. There are staircases to the ground floor, one at each end, which, together with the Corridors and Gymnasium, are lined with glazed brick dadoes. On the ground floor are separate Entrances, with Offices or Waiting-Rooms, Private Rooms for the use of the master and mistress, with Lavatories, &c., to same. The Cloak Rooms and Lavatories for the boys and girls are placed near the Entrances. There is a large Central Hall, capable of seating about 600 persons, with Corridors round same on three sides, from which is access to the various Class Rooms, thirteen in number. All the Class Rooms have raised Galleries, and are lighted from the left. A space of 15 ft. superficial and a separate desk is provided for each scholar. A Chemical Laboratory is provided, and is fitted up with benches to accommodate 36 students working at a time, with separate bench on a raised platform for the use of the master. There is also a Preparation Room adjoining the Laboratory, and a Chemical Lecture Hall, which has a raised Gallery, with fixed benches for the students, and a large demonstrating table, fitted up with the most modern appliances. The Lavatories are in close proximity to the back Entrances, and are of easy access from the School and playgrounds. The style of the building is Gothic (Perpendicular), and is built with Ruabon bricks, with red terra-cotta dressings in tracery labels, string courses, copings, &c., with heads and sills of stone. The roofs are covered with Welsh slates and ornamental red ridges. The whole of the floors are concreted, and laid with wood blocks (except the Entrances, which are tiled). All hollow floors have steel joists and girders, all the Corridors from the Entrances on the ground floor have tiled dadoes, and the large Hall and Class Rooms, &c., have dadoes in timber. The whole of the inside joiner's work is of the best selected red deal, stained and varnished. The whole of the rooms are heated by hot water, low pressure, having ornamental radiators fixed in different parts of the rooms and corridors. The lighting is on the Stott Thorp principle, with ornamental pendants and gaseliers. Ventilation is effected by fresh air inlets with Tobin's tubes, and with outlets in ceiling connected with a large exhaust ventilator on the main roof of Hall, the outside of which is covered with copper, and forms a very attractive feature in the building. The work has been carried out from the designs and under the superintendence of Mr. John W. Firth, Architect, of Oldham. The sum of £18,000 has been expended on land and buildings, and in addition £1,250 is available annually for maintenance.

THE Pleasley School Board have accepted the tender of Mr. Oscroft, of Nottingham, at £3,357, for the erection of new Schools at Shirebrook.

LAVOISIER the great French chemist, is to have a Statue in Paris which will be of an international character. The Institute of France is soliciting subscriptions, which may be sent for the Lavoisier memorial to 55, Quai des Grands-Augustins, Paris. Lavoisier, like our own Dalton and Davy, was, of course, one of the fathers of Modern Chemistry.

At an Exhibition in Philadelphia a novel exhibit will be a huge model gaol. It will show all the latest improvements in prison construction, and will present for inspection a gaol complete in sanitary equipment and absolutely safe. A prisoner incarcerated within its iron cages will be absolutely protected from without, and will find it impossible to escape, even if allowed to work for liberty with the most improved gaol-breaking tools.

ARCHITECTURE AND ANTIQUITY IN THE EAST RIDING.

FROM A CORRESPONDENT.

THE East Riding Antiquarian Society has a fine field for Archaeological and Antiquarian research, and in the summer season some charming excursions are organised. Last week, Londesborough Park was visited, within which there is an early Anglo-Saxon burial place, discovered during the present generation, and its identity has been fairly established by various relics picked up from time to time in the immediate vicinity. The other week a skeleton was found in what is called the Saxon Wood, lying alongside the skull being an old earthenware urn. Most important of the ancient monuments in the Church, as the Rector pointed out, is the brass plate on the Chancel floor, commemorative of Margaret, daughter and heiress of Henry Bromflete, whose marriage with John, Lord Clifford—the "bloody Clifford"—spoken of by Shakespeare—brought the estate into the hand of the Clifford family, then held successively by the Earls of Cumberland and the Earls of Burlington, and passing, through the marriage of Baroness Clifford, daughter of the third Earl of Burlington, with the Marquess of Hartington, to the heir of Chatsworth. From the general character of the masonry the bulk of the Church dates back to the end of the twelfth or the beginning of the thirteenth century; but the Rector indicated a Saxon cross and sun-dial over the main entrance as proofs of the early introduction of Christianity to this part of the World. The sacred edifice was restored in 1679 by the first Earl of Burlington and his wife, who also built and endowed the Village Hospital or Almshouses—an endowment accompanied by a set of rules, characteristic of the period, for ensuring a complete renunciation of the Evil One and all his works. But the most notable of the Earls of Burlington was the third who bore the title. His rule extended over the fifty years from 1703 to 1753—described by Canon Wilton as "Londesborough's Classic Era"—and was marked by a generous patronage of Art and Literature, and the creation of landscape gardening so far as Londesborough is concerned. It was Richard Boyle, the third Earl, who also built Burlington House, London, and the Assembly Rooms at York; and to him Alexander Pope dedicates his epistle on "The use of riches," making distinct allusions to the re-invigorated scenery of the park and pleasure grounds. The Church itself contains no memorials of the Earls of Burlington beyond the funeral banners and armorial bearings to be found in the Vestry. Mr. Temple Moore explained in fuller detail the Architectural features of the Church, depicting the old family pews, long since demolished, as a curious structure in wainscotted oak, with a canopy and sash windows. It was difficult for the visitors to take their leave of Londesborough, with its splendid specimens of oaks and elms, its yew trees and copper beeches in cultivated profusion, its lawns and lakes and the fine avenue of trees, extending over a mile in length. There is something with a still greater attraction for the antiquary in the fact that the Park contains the remains of a Roman road, partly submerged by a lake, and is moreover supposed to be the site of the Summer Palace of King Edwin, where the council was held in which Paulus persuaded the King and his chief men to embrace Christianity. After an examination of the stoutly-built cellars of the old Hall, the party moved on to Nunburnholme, where the Rev. M. C. F. Morris took up the duties of cicerone. The site of an ancient Benedictine Nunnery was inspected, and many theories advanced as to the ground plan of the building, after which Mr. Morris ascended the pulpit of his Church and explained its leading features. Altogether it is a most interesting edifice, dating back to the days of the Conquest, and containing one of the most perfect specimens of a Norman arch, with its soffit rolls, zigzag, and grotesque heads in label. A Norman window admitting but a narrow ray of light, has been transferred from the west wall of the Tower to the further end of the Aisle where the pulpit stands, and shares with the Arch the distinction of being the oldest portions of the structure.

Much controversy arose over a strange obelisk erected in the churchyard from carved stones, which were formerly incorporated with the building. As usual the authorities are not agreed as to the origin of the relic, or even as to the emblematic or non-emblematic significance of the rude carvings upon it. The proceedings were finally wound up by a visit to Burnby Church, where the Rev. C. Wilton unfolded the history of the ivy-clad structure, as far as it could be obtained, from the days of its Norman dedication.

PROFESSIONAL PARAGRAPHS.

A NEW Sunday School is about to be built at Zion Baptist Chapel, Bramley. The plans are by Mr. W. A. Hobson, Architect, of Leeds.

A NEW Baptist Chapel is being built at Stanwell Road, Penarth, from plans by Messrs. J. P. Jones, Richards & Budgen, Architects. The Builder is Mr. T. Bevan, of Penarth. The cost will be £3,080.

FROM designs by Mr. C. H. Fowler, F.S.A., Architect, of Durham, a new Tower for St. Chad's, Tushington, near Whitchurch, is about to be built.

A NEW Hospital is to be built at Morton Banks, for the Keighley, &c., Joint Hospital Board. Tenders are to be delivered by June 12th. Messrs. Judson & Moore are the Architects.

THE Board of the Central London Sick Asylum District, Cleveland Street, W., has selected for the new Asylum the plans by Messrs. Giles, Gough & Trollope. Five competitive designs were sent in.

At Heckmondwike, the Corner Stone of a new Church, dedicated to St. Saviour, has been laid. The Church replaces a temporary one erected at Claremont some six years ago, and will occupy the same site. An anonymous gift of £5,000 made for Church extension being applied to this purpose. Mr. Swindon Barber, of Halifax, is the Architect.

ST. ANDREW'S Parish Church, Haughton-le-Skerne, near Darlington, an edifice dating from the end of the 11th century, was reopened on May 23rd, after restoration and an enlargement of the edifice. The Architects were Messrs. Hicks and Charlewood, of Newcastle-on-Tyne. The cost of the alterations will be about £3,800.

DESIGNS are invited by the Argentine Republic from Architects throughout the World for a new building for the use of the Argentine Congress. Three prizes, one of 20,000 dols., one of 10,000 dols. and one of 5,000 dols., are offered for the most satisfactory designs.

MEMORIAL Stones of the new Class Rooms, &c., adjoining the present building of the Primitive Methodist Connexion, at Rhodes, have been laid. The plans, which are by Mr. Edgar Wood, Architect, of Middleton and Manchester, show six Class and other Rooms, a Lecture Hall, and other conveniences, the whole forming an admirable addition to the building. The contract is in the hands of Mr. Walker, at a sum of £428.

ARCHITECTS are invited to send in competitive designs for the Public Baths and Wash-houses, to cost £30,000, and the Public Library and Museum, to cost £9,000, which the Commissioners of Shoreditch are about to erect on a site in Hoxton. The assessor is Mr. R. Plumble, F.R.I.B.A., of 13, Fitzroy Square, W. Premiums of £125, £75, and £50, will be paid for the best three designs for the Baths, and premiums of £50, £40, and £30, for the best three designs for the Library.

THE ancient little Church of Gursage St. Andrew, near Handley, Dorset, has been reopened. All the pews and West Gallery were removed, and new seats with carved ends and stained dark green, have been placed instead. The Church itself has been generally repaired, though much remains to be done, such as putting new tracery to the windows. Mr. C. B. Hutchinson, A.R.I.B.A., of London, is the Architect, and Mr. H. Adams, junr., of Handley, the Builder.

THE PREJUDICE AGAINST ENGLISH ART.

A PROTEST BY HOLMAN HUNT.

MR. HOLMAN HUNT, whose position in English Art and picturesque personality command public interest, delivered the Romanes Lecture in the Sheldonian Theatre, Oxford, on Thursday last, on "The Obligations of the Universities towards Art." The lecture was a review of the whole Art position to-day, and a strong emphatic declaration came very early. The noisiest spokesmen of to-day, Mr. Holman Hunt remarked, claimed for Art that it should be supreme and independent, and

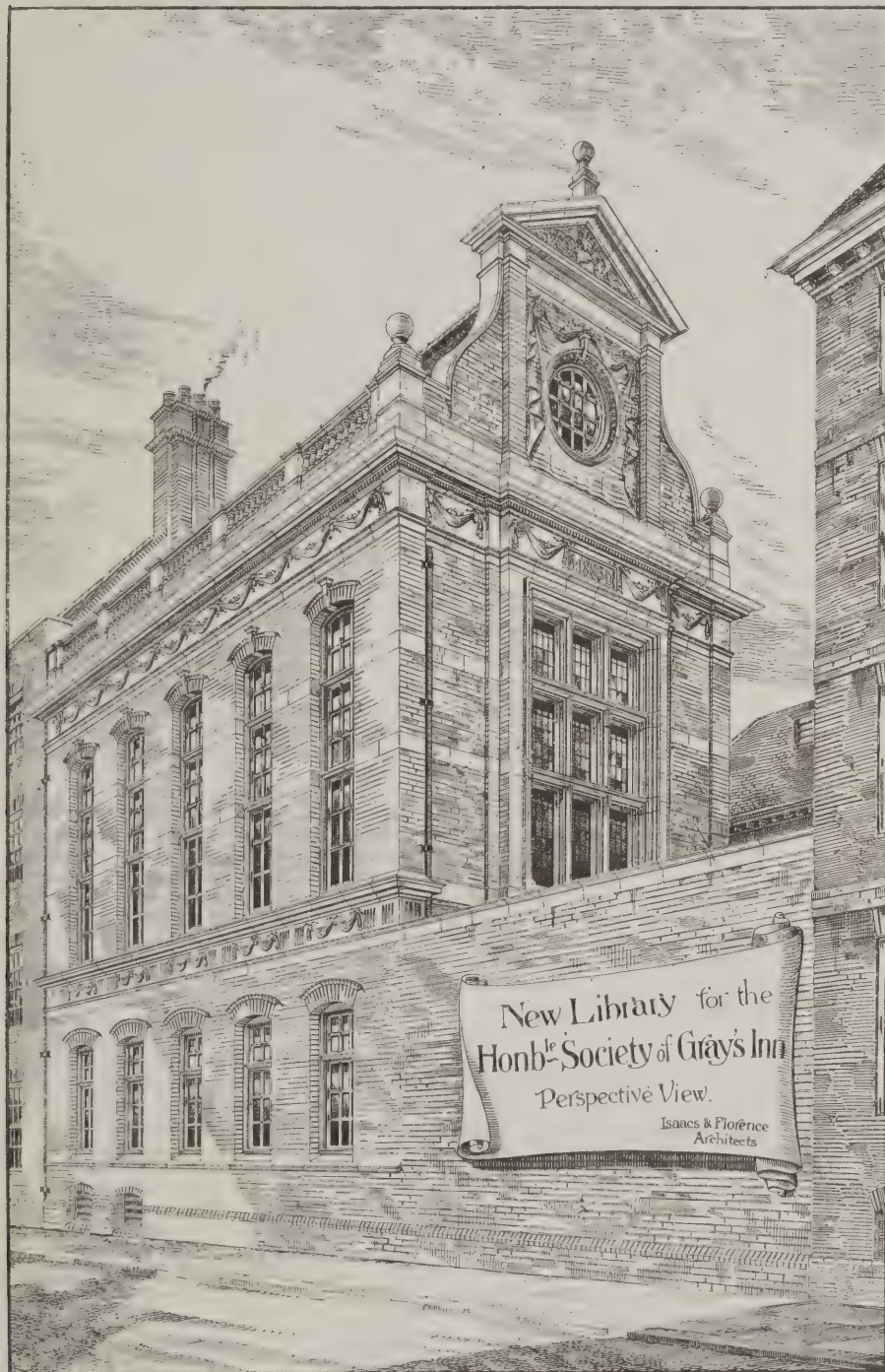
can never be indifferent and hold itself aloof from the vital movement." If it would not take part in the march forward to a great end, but severed itself from sympathy with general goodness, it transferred its energy to evil. If it would not serve honesty and modesty it would pander to grossness—it would be a varnish of corruption, a whitened sepulchre. The effects of hedonistic philosophy already showed themselves, and it was time, he thought, to take alarm. Let us set our faces against this use of the weapons of knightly Art, for otherwise it would be handing over our nation and every precious attainment to the civilised World, with all that was purest—perfected

follow. They might then erect their own temple on a sure platform of truth.

But let them consider—what was true Art? It was one and indivisible, whether it affected the mind by the channel of the eye or the ear, inasmuch as both obeyed precisely the same impulse, and an identical Art inspiration prompted them. With the true artist it was a question after what means he should interpret God's harmony of the spheres, and this would depend upon his natural endowments and upon his opportunities. Mr. Holman Hunt's observation satisfied him that in accordance with the elevation of the artist's aims would be the richness and the infinite mystery of his power of expression. All past great Art had been born of religious thought, and thus acquired its strength, although in its prime it was often employed in an extended field. He drew a line of complete identity between the Literature of a nation and its graphic and plastic Art, and passed Egypt, Greece, and Rome shortly in review, with the object of showing this. Giotto and Dante sounded the leading notes of Italian Art—a melodious heralding of the new life. Returning to modern times, Thackeray had pointed out that bloodshed was so very often introduced in French Art. Indeed, no visitor to Paris could fail to see that bloodshed was regarded as a standard enrichment of a painting.

Mr. Holman Hunt turned to a consideration of the position which English Art occupies. It began nobly at the beginning of the reign of Henry III., but while we were working out our history through wars and troubles, Art was neglected. When peace came, and there was once more an opportunity for the artist, it was the foreign artist who stepped forward. They did most precious work, some of them; but a superstitious prejudice against Native Art was established which had never since died out. The creation and growth and present persistence of this prejudice had done a great injustice to Englishmen. He ran over a list of brilliant English painters—Hogarth, Reynolds, Gainsborough, Romney, Raeburn, Turner, Wilkie, Stothard. The English in most purposes had shown a leading spirit which other nations all admitted and respected. This was so in all but Art. Whenever English youths committed themselves to Art, their prospects of making their lives productive were destroyed, every foreigner being greeted with applause, while the young Englishman had to struggle against prejudice and abuse.

"I protest against this," said Mr. Holman Hunt; "for it ruins the purest and best of Art where under the happiest circumstances the career of an artist must be a hard one." Even for his countrymen's sake, however, he would not attack this established prejudice; but he spoke to save our nation from the disgrace of an Art which was in no sense its own. The obligations of the Universities towards Art—and he came to his recommendations—were to consider the position and take steps in defence of honest English Design. The Schools of Design had for many years entirely departed from their original purpose, and the authorities at Kensington were wisely endeavouring to prevent the inordinate training of mere canvas painters. Then we had far too many training schools over the country already, for many still failed in Decorative Craftsmanship. No educated man need despair of understanding our Art, and a step towards this end should be the giving to graduates of Universities a knowledge of the sciences employed in it. Theoretical teaching alone was apt to mislead the amateur, and his study should be practical. How far should the training extend? That might be a question. But certainly a full acquaintance with the proportions of the human figure was needed, also with the laws of balance and equipoise. Further, a knowledge of the laws of perspective was necessary, and, as following this, the laws of light and shade might be mastered. Then add some understanding of the varieties of Decorative Design, and a young man might be entitled to a degree which would qualify him for any post of responsibility in reference to Art generally. Such a simple provision by the Universities as this test would be a thing of great value to English Art.



have no relation whatever to the national soul. It was to have nothing to do with virtue, vice, honour or dishonour—it was to serve mainly as an excitement to sensation. One of the faction had lately declared that the pleasure which Music, Painting, Architecture, Poetry, or Sculpture should communicate, would be exactly that which a glass of good wine would give to the senses. "Let me say at once," was Mr. Holman Hunt's comment, "that this view of Art is abhorrent to my mind. We are in a World in which all things act and react on one another, and Art

only by long past effort—to ruin and chaos, and the prejudice once blindly entertained against Art would be more than justified. He proceeded to show that in all times there had been evils which had been inherited in the society where Art had arisen. A proportion of these had grown and accumulated about her while she had been overcoming other ills. What was eternally precious was the sublimated element—the element refined and purified by time, and to discover this and apply it to chasten their own developing faculties, was the aim all true artists had to

ARCHITECTURE AND DESIGN.

MR. WALTER CRANE AT THE A.A.

(Concluded.)

ANOTHER point we may note about these Parthenon sculptures, true of the use of Sculpture in the Classical Temple generally, is that they are *not used to emphasize* what I should call the *constructive features*, but to *fill the interstices of the construction*. The building stands without them; on the support few would be prepared to justify their presence in the British Museum if they were there at the cost of the fall of the Parthenon; though there are many who do so now, although they are there at the cost, practically, of its artistic destruction. That is to say, the building without its Sculpture is somewhat like a man with his eye put out.

Close by, however, we find an illustration of the opposite principle, the sculptural emphasis thrown upon the constructive necessities, in caryatid columns of the Erechtheion. In these we have a notable instance of the union of Sculpture and Construction, and it is evident that in the treatment of these figures the Sculpture has strongly felt the necessity of Architectural massiveness, simplicity, dignity and reserve. They each support the cornice upon an abacus and cap, and the columnar vertical feeling is expressed by their erect attitude, slightly varied individually by the seven vertical lines of their draperies.

The caryatid idea is, no doubt, a most difficult one to treat satisfactorily, and there is a sort of painful slavish suggestion about it, as of human beings condemned to support an intolerable burden.

The prototype of the sculptural pediment may, perhaps, be found in the sculptured slab placed to fill the hollow left by the relieving arch over the massive lintel gateways of the ancient Cyclopean buildings in Greece, as at the gate of Mycenæ. In the sculptured lions and column we have, too, a simple exemplification of the symmetric principle in design; as well as of that recurrence or re-schoing in the design of Sculpture of the lines of the enclosing space.

The fusion of Classical and Oriental feeling with Christian mysticism in Byzantine Architecture, with which came in the use of the round vault and dome, opened a new field for that most splendid material, mosaic, which became, *par excellence*, the principal means, as well as the glory of the interior decoration of Byzantine buildings. In the Churches of Ravenna and St. Mark's it dominates all other decoration, its impressiveness being largely due to this, and one feels it to be sufficient in itself. The concave surfaces of the vaulting affords a peculiar appropriate field for the most effective use of the cubes of coloured and gilded glass, by means of which the designs are built up. The very method of mosaic work harmonises it at once with the craft of building, of which it becomes a part. It is a constructive method of surface decoration entirely in harmony with Architectural construction; capable of the utmost splendour, and yet full of solemnity. The nature and conditions of the material seems to place natural limits upon its graphic or pictorial range, which, curiously enough, it appears to be in the nature of the degree of evolution of any Art (or perhaps of artist) continually to attempt to overstep.

One has only to compare the decorative effect and Architectural feeling of the Byzantine mosaics with the late Roman attempts to reproduce Renaissance pictures at St. Peter's to be convinced of its true artistic province and treatment, and to be left in no doubt as to which influence, that of Architecture or of Painting, has proved the most beneficial and inspiring to the mosaic designer and worker. We have in our own time in recent years returned to the old method of working glass mosaic as an Architectural decoration, to working in on the surface, and *in situ*, as the only means of obtaining that richness and variety of surface and play of light, impossible to be attained by the mechanical method of making flat slabs of tesserae on the back of the cartoon in the workshop.

The most important piece of modern mosaic work of our time and country is that upon which Mr. W. B. Richmond is now engaged at St. Paul's Cathedral.

Personally, I am not in favour of modern artists decorating a building of a former age—at least in the present condition of Art and Craftsmanship. I should put new wine into new bottles, and artistic interest into those places most bare of it. But I think, nevertheless, Mr. Richmond and his able assistants, the mosaic workers of Messrs. Powell, are carrying out a very fine, thoughtful, and splendid piece of work, full of ability in design and conception, and technical skill, governed by the Architectural feeling of a decorator, even though that feeling may compel him to mask some of the characteristics of the building he is decorating—but then comes in the modern difficulty. From the mosaic point of view one might wish St. Paul's had been a Byzantine building. Notable characteristics in the design of Byzantine mosaic is the simplicity in the design and arrangement of masses. They are in some instances almost heraldic in their ornamental effect, and there is no doubt that the silhouette of figures or groups as thrown upon a gold ground is the most important consideration in the case of design intended to be seen from a long distance and in subdued or half light, and upon the concave surfaces of a dome.

As subsidiary to its chief decorative splendour in mosaic, Byzantine Sculpture shows a certain restraint, reserve, and a linear feeling in its design, though with considerable richness of detail, as in the carving of the characteristic cushion and basket-like capitals, and screen panels of open-work, which also suggest wicker and rope work motives. This linear feeling, and lattice, wicker, and rope work motive, can also be traced in the typical carved ornament of Romanesque work generally, as for instance, in the mouldings of Norman arches and the caps of the shafts. These characteristics may perpetuate the tradition of the construction of the primitive buildings, in this country, of wood and wicker.

In Norman ornament, the use of recurring line and repetition of unity is very marked, and its peculiar character and richness is due to this. The zig-zag moulding itself is an illustration of the principle, and simply repeats itself in varying proportions and projections. Some of the outer rings of Norman arches and arcading simply repeat the leading constructive form—the semi-circle of the arch itself.

This is still more observable when we come to the Architecture of the pointed arch and the gable, where the mouldings surrounding the window and door-heads repeat in projection the lines of the window and door in serving their original office of keeping the rain from the window and wall, richness of effect being gained by the variety of the alternating concavities and convexities of the section. Gothic work generally illustrates the opposite principle in the use of enrichment to that which we noticed in the Greek, inasmuch as the ornamental emphasis is generally thrown upon the constructive points themselves, rather than on the interstices.

We get the clustered and filleted shaft, the ornate foliated capital in endless variety; the richly-moulded arch, the cusped arch, the window tracery; the moulded ribs of the vaulting, their junctions marked by richly-carved bosses, and, if a corbel or bracket is used, the opportunity is seized by the sculptor for a head or a winged angel, but worked strictly in accordance with the size of joints of the stonework, and therefore always showing the controlling Architectural influence. The exterior of a Gothic building is almost equally expressive of its construction; the buttress is made an important decorative feature and a source of variety, and light and shade, often crowned with a pinnacle, and, in its flying form, supporting an apex, as at Wells, extremely elegant in design, moulded and pierced. The door and window heads are moulded; the spring of the roof is often marked by machicolations, and the parapet battlemented or pierced. The gables are crested, towers are pinnacled and spired, and tipped with vanes. This emphasis on the constructive features gives an expression of organic life, directness, and strength which is characteristic of all Gothic design.

The shadow gained by the recess certainly gives solemnity and impressiveness to the sculptured effigy. The effigy is frequently sculptured upon an arcaded tomb, shields with the bearings of the family filling the panels between

the arches, which are made to subserve by their more formal masses and vertical lines, the freer and more horizontal ones of the sculptured figure. Architectural Design and Sculpture are in these works inseparable. The Later Gothic tombs take the form of shrines built clear from the wall and overhung with rich tabernacle work, buttressed, and sometimes enclosed with wrought-iron railings, in the design of which may again be seen the prevailing Architectural influence of time.

Not less instructive for the evidence they give of Architectural influence are Mediæval brasses, in the treatment of the figure, the enclosing borders, and the use of inscriptions. More especially remarkable in design and draughtsmanship are the Flemish brasses of the Gothic period, where the full-length portraits of the personage or personages commemorated occupy the principal space in the panel, not cut out in silhouette and inlaid on the stone slab, as generally is English brasses, but relieved upon a rich diapered background.

It is the same in other branches of Design, such as stained glass, which in its best shows such close relationship to the Architecture of the building it enriches. With the evolution of the window from the small round-headed loop-holes of the Byzantine, through the simple lancet-pointed lights separated by solid masonry, to the foliated tracery and subdivided mullions of the Later Gothic, the splendour of mosaic gave way to the splendour of the stained-glass window—at first a jewelled web of geometric lead thrown across the light, the form of the simple or cusped points of the tracery influencing the lead lines they enclosed, and the long vertical lines in the figures of saint and angel re-echoing the long lines of the narrow pointed light, into which ascended later the pinnacles of the canopies. Up to the end of the fifteenth century each light was still generally regarded as a separate panel, but with the large windows subdivided with light tracery and thin mullions, it became feasible to consider the design as filling the whole window.

A kindred feeling determines the treatment of the wall, and perhaps nowhere is the necessary Architectural influence more felt than in mural decoration. Anything which disturbs the general flatness and repose is out of keeping. We may gain a certain accidental or naturalistic interest, but at the cost of decorative repose and richness.

The Italian fresco painters of the Early Renaissance, Giotto and his School, thoroughly understood this, and though in details Naturalism was carried quite far, as in the beautiful frescoes in the Riccardi Chapel at Florence by Benozzo Gozzot, in spite of all their richness and variety, they remain essentially wall paintings, as completely mural as the finest arras tapestry, such as those splendid Burgundian specimens at South Kensington, which, while absorbing much of the new splendour and detail of the Early Renaissance, remain Gothic in spirit.

The great principle in the design of these tapestries, or of early wall painting, was the exclusion of sky-spaces and atmospheric planes which necessarily, in proportion to the illusive design with which they are represented, must throw the wall out of the perpendicular. There is an instance of a sky-distance having been introduced later at South Kensington.

We do not want to think we are out of doors while in a room, so that all successful mural decoration never forgets the wall—it acknowledges, in short, the Architectural influence.

The same principle is to be traced in other textile design, in the geometrically planned and heraldically treated silk hangings of Sicily, and the Venetian and Genoese velvets and brocades, with mottoes derived from Eastern sources, which frequently repeat the geometric foliated forms of Arabic and Gothic Architecture, as in the brocade from an Annunciation in Malines.

We see the value they are to the painters and designers in affording rich back grounds of definite recurring masses of pattern, to oppose the varied outline and relief of their figures.

In jewellery, metal work, pottery, inlays, in the spacing of the book cover, the distribution of its tooling; in the arrangement of the book page and its decoration; in the form of choice type—everywhere in beautiful Art, we may find the Architectural influence, that poetry of

the constructive sense which is the common sense of Art, and adapts itself to all manner of useful things, giving to each its particular and ornamental value, and insuring it harmonious place and relationship in the great household of Design.

I believe that in any period or country where exists anything like a distinct and living Architectural style we shall find its influences coming out in all sorts of ways, harmonising and controlling invention, and bringing all the Arts of Design—which really owe their existence to Architecture—into relation with itself. In countries like Japan, which (perhaps owing to its liability to constant earthquakes) have no stable or noble monumental type of Architecture, it is noticeable, in spite of extraordinary artistic skill, there is a tendency towards triviality in the design of accessories: but even here it is noticeable how the form of their main constructive material—the bamboo—constantly reappears as an element in Design.

It is curious to trace the lingering traces of Architectural relation still clinging about such unrelated Art, as much modern sculpture (or statuary) and easel painting—I mean in the pedestal as essential to the one, as the frame moulding is to the other. Both Sculpture and Painting have set up a supposed independent existence—have gained, perhaps, a decree of judicial separation from Architecture, if not a *decree nisi*. But it has only been for the sake of convenience and to meet certain commercial conditions; and thereby it becomes a grave question with artists—with all who care for beauty and harmony in Art and Life how far a unified Art is possible under the rule of the huckster and the speculator.

It is certain in any case we shall never be able to build up a noble style in Architecture and bring about a harmonious unity in all the Arts of Design without sympathy and co-operation, without some mutual understanding of each other's work and aims on the part of artists, whether their work is constructive or graphic, but I think of late years there are not wanting signs of a strong and growing feeling in this direction, which is beginning to tell upon contemporary work.

THE ART OF PHIL MAY.

IT is not that Phil May is greater as a humoristic draughtsman than those who have preceded him, but he is distinctly more original. Gilray and Rowlandson—with whom his Art has no affinity—Cruikshank, Leech, H. K. Browne, Doyle, Keene, to say nothing of the present contributors to *Punch*—Tenniel, Linley Sambourne, Du Maurier, and others—have each and all distinguished themselves, but not in just the same manner as the young man whose pictorial jokes fill a Gallery at the Fine Art Society in New Bond Street. Never attempting to reach humour through grotesque exaggeration of form or feature, as was the case with some of our earlier caricaturists, Mr. May's study is Nature in its simplest form. With an appreciation of the comic side of life that is almost inspiration, he rarely indulges in parody, and never in satire that is not born of his subject, whilst it is wholly lacking in the tinge of bitterness that sometimes disfigures the work of professors of his particular Art. But when he encounters any droll phase of life, the artist, with keen power of observation and a talent amounting to genius, can transfer his impression to paper with a power that has never been surpassed. In his peculiar style of drawing, Mr. May has invented a manner of his own totally distinct from any recognised method. With any amount of labour and pains, he draws in a figure until he feels he has perfected it, and then he rubs out the minor or unimportant lines, leaving only the major line indicating the form. This plan, which perhaps originates with Mr. May, has this advantage. The beauty of the draughtsman's Art is its simplicity—we all know how one wearies of elaborated detail—whilst the process explained gives the fullest possible result with the least display of the means by which that result is attained.

A NEW Wesleyan Mission Hall is to be built in Barnsley Street, Hull. The building, which is to cost £1,110, will accommodate 250 persons.

PERILOUS STATE OF PETERBORO' CATHEDRAL.

REPORT BY JOHN PEARSON, R.A.

AFTER a careful survey of the upper part of the West Front, I must say that I am thankful more mischief was not done by the late storm, considering the sad state the masonry has got into. It seems indeed surprising how some of it resisted so terrible a visitation, for not only is the stone in numberless prominent places very much decayed, but the mortar in the beds and joints has come out to a considerable depth, and, but for some iron cramps—also much decayed—the tops of all the pinnacles would, in all probability, have been thrown down. There can be little doubt that much injury has been done in very severe winters through the alternate changes of rain, snow, and frost playing into the open joints. Some of the masonry too has suffered in consequence of this, and much more would it have suffered but for the enduring quality of the stone of which the Cathedral is built. The time has now arrived when some general repairs must be undertaken, extending over the whole of the western portion of the Cathedral. It is absolutely necessary that its various features should be preserved, and, unless these repairs be done at once, I am sure that ere long a much greater work will have to be faced. The features which have been thrown down must, of course, be rebuilt, using up all the old stones as far as possible. As regards the West Front itself, what I have said with reference to the pinnacles and the work in connection with them, applies equally to this. The masonry over the whole of it, especially in parts above the three arches, has suffered, and is suffering from neglect and the want of timely repairs, but to what extent I cannot say until a scaffolding has been erected. This scaffolding I would venture to urge the Dean and Chapter to allow me to put up as soon as possible. It is obvious to every observer that the centre part between the flanking towers bends considerably outwards; careful plumbing has determined that the detached clustered columns with the part up to the string course above them lean outwards to the extent of fully two feet, and that the three gable-ends have an inclination in the same direction of about six inches. Upon looking for the effect of such a divergence from the perpendicular of these pillars and arches upon the work inside the Arcade, one is surprised to see how little there is to indicate that such a great movement has taken place, for instead of huge gaps in the groining which one would have expected to see, there are only—so far as can be discerned from the ground—some slight openings in the cells. Coupling this fact with the fact that the three gables lean over at a less angle than the pillars below them, and that some of the work in connection with these gables inside the roof is nearly perpendicular, I am very much disposed to think that the pillars began to settle and to lean outwards at a very early period, even perhaps before the gables were erected, and certainly before the groining of the Arcade was put in. It must have been at some early period that the four great ties were introduced which pass through the wall for the purpose of hanging on the West Front to the square Towers behind; these ties are still in a perfect state, and show clearly that since their introduction little or no further movement has taken place. These Towers have gone over a little to the west, but whether it is partly in consequence of having the weight of the West Front upon them I am not prepared to say. In addition to these ties there are three others which come over the centre of the arches and are connected to continuous horizontal beams which lie inside the gable walls, and are, opposite to each gable, cleverly framed together like a trussed beam; they also add material support to the walls. The centre gable is, however, not so well supported as the two side ones, because it has not a direct hold on to the Towers. I would, therefore, advise that a strong girder be introduced, stretching across the space between the two Towers and built into and strutted from them to which two or three ties similar to the existing ones could be attached, thus the centre part of the west end would be effectually secured. I would also advise the introduction of a strong iron tie bar

some little distance above the caps of the pillars to connect them with the wall behind for the purpose of checking any further movement westward, additional help in this direction would be gained by the removal of some 2 feet of the filling in over the groining, for the weight of this needless mass of masonry induces a lateral thrust decidedly injurious to the pillars. As regards cost, I can give you no particulars at present, and not until the work to be done has been carefully examined and considered in detail. That part of the work which is above the roofs and can be got at can be estimated without much difficulty.

Writing subsequently, Mr. Pearson says:—“I should like to emphasize what I said as to the unsatisfactory condition of the Front, and the necessity for immediate steps being taken for its preservation. I do not refer merely to the fact that the two main Piers of this Front lean over 2 ft. and 2 in. respectively in a height of 78 ft., but to the insecurity which is manifest in so many places, for instance—the stones forming one of the rings of the northernmost arch are much out of place, the other rings over it are twisted and fractured, and the quatrefoil opening above is greatly distorted, and any further movement here, however slight, might lead to deplorable results. The corresponding portion of the southernmost arch also manifests a similar defection, but to a somewhat less extent. It would be a wise precaution against accidents to fence off the northernmost archway until it has been properly examined, and the arch and the work in connection with it have been made secure.”

The Restoration Committee unanimously resolved that the Sub-Committee be requested to prepare an appeal—(1) For the amount required for the repair of the Pinnacles and Spires on the Towers of the West Front. (2) For such an amount as, after conference with the Architect and Builder, may be thought probably sufficient to secure the safety of the remaining portions of the West Front. (3) For the amount still required to complete the repairs to the Transepts and Eastern Chapel.

For the erection of the Blackfriars Street and Marlborough Road Schools, the School Board for Salford is applying to the Public Works Loan Commissioners for a loan of the sum of £18,454.

MR. M. HAINSWORTH, who for thirteen years has been Surveyor to the Ilkley District Council, has resigned his post in order to take a similar one under the Teddington District Council, Middlesex. It has been decided to advertise for a successor at a salary of £150 a year.

For the first time in its history Victoria University, Manchester, has recognised the services rendered by eminent men in the various spheres of public life, Literature and in Science, and has conferred honorary degrees on several distinguished noblemen and gentlemen. The honorary degree of Doctor of Laws has been conferred on Mr. Alfred Waterhouse, R.A.

It is with regret that we announce the death of Mr. Henry Sumner, the well-known Liverpool Architect, who died at his residence 40, Falkner Square, last week. The deceased gentleman was noted for the part he took in suggesting public improvements. His principal one, that of high level Bridges from Dale Street to Lime Street, form an important feature at the Spring Exhibition, at the Walker Art Gallery, now open. The deceased Architect had an extensive practice, and designed many buildings in Liverpool and elsewhere. He was a member of the Liverpool Architectural Society, of which he was an ex-president.

THE Hanley Town Council has accepted the following tenders: Mr. C. Cornes, Hanley, £1,050, for the erection of Terrace Walls, Steps, &c., in the new Park; Mr. Cornes, £785, for the provision of Piers and abutments to four Canal Bridges in the Park; and Messrs. H. & T. Danks, Oldbury, £1,060, for Boilers, Electric Light Mains, and other appurtenances. Application is to be made to the Local Government Board for permission to reborrow the sum of £8,000 (part of a loan of £11,500 sanctioned on December 17th, 1883, for the purchase of the Queen's Hotel for the purposes of a Town Hall), on security of the Town Hall property, for a further period of eight years.

REVISING THE R.I.B.A.

THE QUESTION OF FELLOWSHIP.

NO EXHIBITION OF WORKS TO BE TOLERATED.

A NUMBER of Associates of the R.I.B.A., called together to consider what steps should be taken at the forthcoming and future election of Council of the Institute, with respect to the qualification for Fellowship, met at Dr. Williams' Library last night week. The meeting had been convened by circular. Mr. Owen Fletcher presided, and stated that a circular, signed by over sixty Associates resident in London and thirteen provincial members, had been issued to each of the candidates nominated for election to the Council of the R.I.B.A.—47 in all, the total number to be elected being 36. The circular read as follows: "We, the undersigned Associates, are anxious to obtain your views upon the question of the qualification for the Fellowship of the Institute, and we should, therefore, take it as a great favour if you would be so kind as to forward a brief reply to the following question to Mr. H. V. Lanchester, 12, Great James Street, W.C., before Friday next: 'Are you in favour of restricting the Fellowship of the R.I.B.A. to (1) Associates, (2) other Architects who were in practice before 1880, and (3) those whose work is of exceptional merit? In the case of the latter, would you advocate that photographs of their executed work should be exhibited in the Institute Rooms one month before the election?'" Mr. Lanchester read a number of letters received in reply. Mr. Ernest George was against restricting Fellowship to Associates, and his reply to questions 3 and 4 was "Yes." Mr. Aston Webb was in favour of restricting Fellowship to Associates and those who had done really good work. Mr. J. M. Brydon would not restrict any Architect from becoming a candidate who could fulfil the requirements of the Charter, except for the quality of his executed work, and of that he thought the Council should be the judge, as at present. Mr. C. Hadfield, the President of the Sheffield Society of Architects, writing as a private member, sympathised with the objects aimed at in the circular, but did not think that those objects went far enough. He had been a member of the Institute for many years, and was now losing all confidence in what it is likely to accomplish. He fully sympathised with the views of the memorialists. Architecture was not a profession, nor a business, but a constructive Art. An Architect who loved his craft, and desired to steer clear of the commercial element, which the R.I.B.A. seemed to be determined to force into the ranks of the Fellowship, could not do otherwise. He was willing to sign Clauses 1 and 3, but with the proviso that in addition to the candidate submitting photographs of his work, he should append plans, and some kind of endorsement from his local society that he was a *bona fide* Architect, and not a land surveyor or estate agent. Mr. John Slater saw no objection to Clauses 1 and 3, but could not support Clause 2, as it would inflict hardship on many provincial Architects who had never been Associates of the Institute. As to the exhibition of photographs of the executed works of candidates in the Institute Rooms, he thought this would be most improper, and should strongly oppose it. Mr. Phéné Spiers was not in favour of any other restrictions as regards the Fellowship than those now prescribed in the bye-laws. As for questions 2 and 3 he considered that integrity in professional practice was of even more importance in a candidate for the Fellowship than exceptional merit of design. The R.I.B.A. was not a Royal Academy with limited membership, but a professional society, to which all practitioners ought to belong. The only limitations to the Fellowship should be integrity of practice; sufficient evidence that the candidate is really the author of the works to which his name is attached as Architect; the execution of work of sufficient importance, either in artistic design, in construction or in extent, to warrant the application for the Fellowship, still retaining the seven years' limit. Mr. Leonard Stokes was distinctly of opinion that a man's executed work was the one and only test that should be applied to a Fellow. Examinations on paper might be all very well, and a proper test for Associates, but in his opinion they were no

good whatever for Fellows. The fact of an Associate having passed an examination brought him no nearer to the Fellowship as far as his Architecture was concerned. Mr. Paul Waterhouse's views were quite in accord with the general spirit of the questions asked. Mr. William Young thought the qualification for Fellowship should be the exceptional merit of a man's work. That was the only way to make the Fellowship of any value. The suggestion to exhibit photographs of candidates' work was a good one. Mr. Atkin Berry, an Associate, was in favour of restricting the Fellowship to (1) Associates, and (2) other Architects in practice before 1880, and from those whose work is of exceptional merit. Mr. Flower was in favour of restricting the Fellowship to (1) Associates, (2) Architects in practice before 1880, and (3) those whose work is of exceptional merit. He believed in the exhibition of photographs, but thought the number should be limited. Mr. F. T. W. Goldsmith's replies were all in the affirmative, but he added to the second:—"Provided the Architect is in active practice." Mr. E. J. Dodgshun's, of the Leeds and Yorkshire Architectural Society, replies were, "yes," to the first and third, and "no" to the second. Mr. Caroe supported the view that a candidate for the Fellowship should be judged by the quality of his executed works. Letters from fifty-nine Provincial and other Associates had been received, supporting the proposals to limit the qualifications for Fellowship. Of these twenty-five agreed to the limitations contained in the circular, twenty-six proposed to only admit Associates and other Architects who had done exceptionally good work, 6 desired Associateship to be compulsory, and 2 accepted proposition 3 only. As to the exhibition of photographs, there was a general opinion that such a course would be desirable.

Mr. Knight suggested that the words of the third question should be added to the first, so that the motion would be as follows: "That this meeting declares itself in favour of restricting the Fellowship of the Royal Institute of British Architects to Associates, and to other Architects whose work is of exceptional merit."

Mr. Langston accepted the suggestion, and questions one and three, as incorporated, were agreed to. The proposal to admit other Architects who were in practice before 1880, was not pressed.

It was moved "that this meeting would suggest to the Council of the Royal Institute of British Architects the desirability of exhibiting, for one month before the election, photographs and working drawings of the executed works of all candidates for the Fellowship." The motion having been seconded, an amendment was moved to the effect that a list of the executed works of the candidate be attached to his name in the nomination published in the *Institute Journal*.

Both the amendment and the original motion were lost.

An Associates' Committee was appointed as follows: R. Shekleton Balfour, Sydney B. Beale, John Begg, Arthur J. Bolton, Owen Fleming, B. F. Fletcher, James S. Gibson, Sydney K. Greenslade, Francis Hooper, H. V. Lanchester, John Murray, J. E. Newberry, G. A. Price-Cuxson, J. Humphreys Jones, Andrew W. Prentice, Edgar H. Selby, F. W. Troup, Charles E. Bateman, Harold Brakspear.

THE Windsor Board of Guardians propose to borrow £1,000 with the view of making additions to the Infirmary.

A NEW Wesleyan Chapel is to be built at Barnton, in the Northwich circuit. The cost, including site, is estimated at £1,500.

SIR FREDERIC LEIGHTON'S health is, according to news received from Algeria, a good deal better. It is probable that he will return to London in the course of next month.

THE Arts and Crafts Society of Ireland is decorating its Hall in the Royal University Buildings, in preparation for the forthcoming Exhibition. An arrangement of dais tapestry hangings and fresco cartoons suggested by Mr. Walter Armstrong has been unanimously adopted. The Hall is large, and the wall space at the end necessitates a decorative treatment, which will form a background to the Society's exhibits.

THE FRESCOES AT THE ROYAL EXCHANGE.

TWO panel pictures out of the twenty-four which in time will decorate the interior of the Royal Exchange, were unveiled on Thursday. They are the work of the President of the Royal Academy and of Mr. Robert Macbeth. Both are gifts, the work of Mr. Macbeth having been presented by Mr. Deputy Snowden, and that of Sir Frederic Leighton being an offering to the City from the artist himself. Neither is in reality the "fresco" which it will be apt to be mistaken for; the works, executed by some slight modification of the Gambier Parry process, being, like the large allegorical pieces at Amiens, by the great master of Decorative Painting of our time—M. Puvis de Chavannes—in reality paintings upon canvas, delicately transferred to the wall.

Sir Frederic Leighton's canvas, which has for subject the commerce between the Ancient Britons and the Phœnicians, is a picture which displays hardly one of his possible deficiencies, and, in an abundant measure, his strength and his refinement, his fullness of invention, his noble suavity of line, his stately and sumptuous colour. When the very greatest of an artist's gifts is his gift of pure Design, it is natural, of course, that he shall be seen at his best in Decorative Painting. Sir Frederic is so seen at South Kensington, and, again, and even more effectively at the Royal Exchange. The "Commerce" which he depicts, consists, it must be supposed, of certain barterings between the dark and melancholy Orientals, who display upon the shore their jars, and necklaces, and bracelets, and fabrics of Tyrian dye, and a group of blonde yet warmly coloured natives, one or two of whom appear, it may be, scarcely satisfied with the bargain that is proposed, while others examine the precious objects with an intense and careful curiosity. Sir Frederic has taken a charitable view of the outward appearance of the Britons. One man at least is a model of comely strength, and more than one of the women—she especially who is crouching on the beach, absorbed in the charm of the Phœnician raiment—is of refined and exquisite yet never too effeminate beauty. The scene passes in serene weather; a sky of white cloud, with no threat of storm, hanging over the deep blue seas of our south-western coast.

Mr. Macbeth's picture has for theme an historical incident of only half a century ago—the opening of this very Royal Exchange by the young Queen, accompanied by Prince Albert, and attended by the Duke of Wellington and Sir Robert Peel. Into the corner of the piece, but very unobtrusively, Mr. Macbeth, following the good Italian and good Flemish custom of the Renaissance times, has introduced a portrait of the donor of this present work. The moment chosen for portrayal is that in which the Lord Mayor of the period bows before the Queen, who has a gesture of appropriate and characteristic graciousness. The open door, with all the metal work surmounting it, is seen immediately behind them. A Beefeater adds to the scene a picturesqueness which, whatever may be the opinion of the modern fashionable dressmaker, does not really belong to the "early Victorian" costume. Behind the Beefeater, and the scarlet and white and black cloaked figures, comes a silvery vision of the street. In his portraiture, in his disposition of the subject, in his treatment of a difficult, yet worthy, theme with dignity, Mr. Macbeth has shown himself thoroughly entitled to the trust that was reposed in him.

Bournemouth is to have a new Playhouse. The Grand Theatre, Boscombe, which has been constructed by Mr. Archibald Beckett, was opened last week.

A SCHEME is on foot for erecting a new Church to accommodate 600 persons, at a cost of £6,000, for the Emanuel district of St. Thomas, Exeter.

It has been decided to enlarge the Vestry of Keighley Parish Church to about four times its present size, it being much too small. The estimated cost is about £500, a quarter of which the Duke of Devonshire has generously promised to defray.

SOCIETY MEETINGS.

Northern Architectural Association.—

An outdoor meeting of this Association was recently held, when 38 members attended, including Mr. J. Oswald, F.R.I.B.A., the president. Assembling at Jarro, the first place visited was Christ Church, where the new Chancel Screen and fittings recently erected in memory of the late Lord Northbourne, from designs by Mr. Crawford Hick, Architect, of Newcastle, were examined. The party next proceeded to the old Church (St. Paul's), which is one of the most ancient edifices in the kingdom. Embarking on a steam launch, the members proceeded down the Tyne and viewed the Lighthouse in progress of erection on the South Pier. At the Pilots' Landing, conveyances were in waiting, and the party drove to St. Michael's Church, Westoe, where the Rev. C. E. Adamson conducted them over the building, which has just been enlarged by the addition of Aisles from the designs of Messrs. Hicks & Charlewood, of Newcastle. Thence proceeding to the village of Westoe, the members were permitted to view the Mayor of South Shields' residence, which was erected several years ago from the designs of Mr. J. J. Stevenson, of London. Finally the party proceeded to Harton Cemetery, and inspected the Chapels and Entrance Lodge erected in 1889, and designed by Mr. Henry Grieves, of South Shields.

York Architectural Society.—

This Society held its first summer excursion on the 25th ultimo, when the members visited Tadcaster to view the residence of Mr. T. H. Ingleby, recently erected from the designs of Messrs. Hornsey and Monkman, York. The party was met on arrival by Mr. Ingleby and Mr. Monkman, and conducted over the building, which is of stone, in a modified Elizabethan style of Architecture, and is situated on high ground overlooking the river Wharfe. The Entrance Hall, staircase, and principal apartments are finished in oak. A chamber organ, in course of construction by Mr. Binns, of Bramley, will, when completed, include a novel combination of pneumatic and electric action. The building and Stables are lighted throughout by electricity, and every modern convenience in the way of fittings, electric bells, &c., combined with a system of heating and ventilation, dual water supply and sanitary arrangements, form a model country residence. After visiting the Greenhouses and Stables, the party were shown over the extensive Flour Mills belonging to Mr. Ingleby, and then returned by train to York.

The Institution of Civil Engineers.—

At the annual general meeting of this Institution, which was held in the Hall of the Royal United Service Institution on the 28th ult., Sir Robert Rawlinson, K.C.B., President, occupied the chair. The report, commencing by referring to the change that had taken place in the roll of the Society during the past twelve months, stated that 29 Members, 286 Associate Members and 5 Associates had been elected, and 2 Members and 3 Associate Members were restored to the roll; while the deaths, resignations and erasures amounted to 170. The numbers of all classes on the books at the end of the Institution year were: Honorary Members, 17; Members, 1,862; Associate Members, 3,687; Associates, 355; making a total of 5,921. The report having been adopted, votes of thanks were passed to the President, the Vice-Presidents, and the other Members of the Council for active services in the management of the Institution. The ballot for Council resulted as follows: Sir B. Baker, K.C.M.G., President; J. Wolfe Barry, C.B., W. H. Preece, C.B., Sir Douglas Fox, and James Mansergh, Vice-Presidents; and of W. Anderson, D.C.L., Alex. R. Binnie, W. R. Galbraith, J. H. Greathead, J. C. Hawkshaw, C. Hawksley, Dr. John Hopkinson, Alex. B. W. Kennedy, LL.D., Sir G. L. Molesworth, K.C.I.E., Sir Andrew Noble, K.C.B., Sir E. J. Reed, K.C.B., M.P., W. Shelford, F. W. Webb, Sir W. H. White, K.C.B., and Sir E. Leader Williams. The Session was adjourned to the second Tuesday in November.

Edinburgh Architectural Association.—

The annual meeting was held in the Royal Institution on Wednesday evening last, Mr.

W. W. Robertson, of H.M. Board of Works, presiding. It was reported that the membership had increased to 295, and that the funds were in a satisfactory condition, being £30 greater than last year. Other reports were submitted and approved. Office-bearers were then elected as follows:—President, Dr. Rawand Anderson; vice-presidents, Mr. Thomas Ross, F.S.A., Scot., Mr. J. Balfour Paul, Lyon King of Arms; honorary secretary, Mr. T. Fountain; honorary treasurer, John Johnstone, C.A.; librarian, Thos. Ross, F.S.A., Scot. In his valedictory address, Mr. Robertson dealt with the work of the Association during the past session, making special reference to the various interesting lectures and excursions. He said that in his presidential address three years ago, he referred to the projects for the rebuilding of the City Chambers. He then expressed the hope that the centre of municipal life and activity would never be removed from the old town. He also then expressed the opinion, which, he thought, met with the general concurrence of the members of the Association, that the most appropriate method of housing the Council would be by the completion and extension of the buildings they at present occupied. He referred to the question that night to say how glad he was that it was now definitely settled, and settled in a most satisfactory way, by the Town Council, on the initiative of the Lord Dean of Guild. The Town Council had now acquired old property in the neighbourhood which would give the accommodation required to complete the building satisfactorily.

The Glasgow School of Art—Architectural Department.—

An excursion of about 40 Architect Students of the School of Art, under the direction of Mr. W. J. Anderson, A.R.I.B.A., and Mr. Emmet Brady, recently visited the Abbeys of Melrose and Dryburgh. A specially prepared paper, dealing with the history and Architecture of the buildings, was read by Mr. Anderson, and studies of the buildings by the students completed the day's programme. Mr. Anderson has accepted the appointment of Master of the Architectural Classes of the School of Art, and, with an assistant, will take charge next Session of this important department.

PROFESSIONAL PARAGRAPHS.

ON Thursday last at St. Matthew's Church, Newcastle, a magnificent Reredos, recently put into the Church in memory of the late Mr. R. J. Johnson, F.S.A., F.R.I.B.A., was dedicated. The Reredos, which is from the design of Messrs. Hicks and Charlewood, Grainger Street, Newcastle, is, with its super-altar and gradine, executed in Caen stone, and stands about 11 feet above the Altar, its width being identical with the length of the same. Although much smaller in size and scale its design is suggested by the great Screen at Winchester Cathedral, erected in the latter portion of the fifteenth century. In this central portion we have a range of niches on a traceried base, and these niches are intended for figures of adoring angels. Immediately over the centre of this rises the Cross with the figure of our Lord crucified; the side niches at the foot having figures of the blessed Virgin and St. John. Over the canopies is a richly carved cornice and open cresting, the severe line being only broken in the centre for the crowning feature, our Lord, in majesty, surmounted by a richly-carved canopy and crocheted spire. The figures have been carved by Mr. G. W. Milburn, of York, all the rest of the work being executed by Mr. Robert Beall, of Newcastle.

FROM the plans of Messrs. Hardy and Wright, Architects, Edinburgh, a Church for the new parish of St. James has been erected. The building is situate near Leithwalk Station. The ground floor is about 12 feet below the street level, and allows the basement floor to be utilised as a Hall, which accommodates about 800. The acoustics are unexceptionally good. The Interior has an open timber ceiling, and for better light, the windows at side galleries have been provided for by triplet lancets and gables of size determined by the position of the main trussed framing of the roof. The Church is heated on the low-pressure system by 2 in. pipes, and a separate but

circular arrangement heats the Hall below. The total cost has been about £4,000.

A NEW Parish Room is being built adjoining St. Michael's Church, Ipswich. Mr. E. S. Bisschop, of Ipswich, has prepared the plans, which Mr. William Grayston, of the same town, is carrying out. The building will be connected with the Chancel of St. Michael's by a Clergy Vestry. The principal entrance from Upper Orwell Street will be by a red brick Porch, harmonising with the rest of the building, and from Bond Street by a Vestibule 12 ft. by 7 ft. The dimensions of the Interior will be 39 ft. square, and the Clergy Vestry 20 ft. by 15 ft., whilst there will also be a Kitchen 15 ft. by 12 ft. The floor will consist of solid wood blocks. The estimated cost is £1,000.

THE large Hotel which is being built in New York from plans by Messrs. Reeves and Sons, of Broadway, in that city, is to be known as Herald Square Hotel. It will have frontages to Broadway Sixth Avenue and Thirty-sixth Street, will be fifteen stories in height, and will cost for site and erection at least £450,000 sterling. The first two stories of the facades are to be of limestone, the upper portion being in light brick and limestone. The building will be of steel construction, and the porous fireproofing used will be strengthened by wire cable run through it. The only material not fireproof in character in the entire building will be the wainscoting on the lower floors and the wood used for doors and windows. All the floors will be of cement. There will be no interior shafts, except those used for the five lifts.

MESSRS ARTHUR BAKER and Harold Hughes, of London, are the Architects for the new Mission Room and Schools, Uxbridge Street, in connection with St. Catherine's Church, Tunnel Road, Edgehill, Liverpool, which has been formally opened. The Mission Hall and Schools are contained in the same building, the former being above the latter. The Schools comprise girls' and infants' departments, accommodating 228 girls and 196 infants respectively. There is a large class room for cookery purposes. The Mission Hall, which is lofty and well lighted, is 51 feet long by 40 feet wide. The Contractors are Messrs. Brown and Backhouse, of Liverpool; Heating Engineers, Messrs. Harlow & Sons; Ventilating, E. Hatton; Gas Fitting, Jas. Cooper & Sons; Asphalting of playground, Mr. Gilbertson. The entire cost has been £4,028 2s. 6d.

THE Voluntary Schools Committee at Lewes having practically formulated the scheme for the provision of additional School accommodation in the town as required by the Education Department, it has been arranged to extend Malling School, and plans for this purpose have been submitted to the Department for approval. A new School to accommodate 410 children, viz., 100 boys, 100 girls, and 210 infants, is to be built on a site below St. John's Church near the Pells; and Mr. Creed, Architect, of Finsbury Circus, is now preparing the plans.

ANOTHER addition to the many Metropolitan Synagogues has been made. It is situated in Great Alie Street, Whitechapel, in close proximity to the Jewish Working Men's Club and Institute. The cost of the building, which comprises the Synagogue, Hall, Vestry Room, and Dwelling House, was £1,600, Mr. Lewis Solomons, of New Broad Street, being the Architect, and Mr. Richardson, of Finsbury Square, the Builder.

Good progress is being made with the first new School in connection with the Horfield School Board. The site is near the gaol, and having decided to purchase an acre of land, there is ample room for buildings and playgrounds, and to allow of extensions when necessary. The building, which is in the English Renaissance style, is of pennant stone with freestone dressings, and the high pitched roof is covered with Broomhall tiles. There are two central Assembly Halls, 42 feet by 24 feet, and arranged around these are eight Class Rooms for boys and girls. A Cookery Room and caretaker's apartments are included. Mr. W. V. Gough is the Architect, and Mr. H. G. Rossiter the Builder. The building, which, with land and equipment, will cost about £7,500, is expected to be ready for occupation in September.

The Builders' Journal COMPETITIONS.

No. 3.—Swimming Baths.

Designs for Swimming Baths in a country town of 5,000 inhabitants. To contain cold water bath fifty feet long, three feet to six feet deep, with necessary dressing boxes; six private washing baths for gentlemen and three for ladies; necessary heating and ventilating appliances to be provided, together with waiting and caretaker's rooms, the entire cost not to exceed £3,000. The site is 100 feet deep and of any necessary frontage, but entrance can only be obtained from the front. All designs to be delivered on or before Monday, the 10th day of June.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPOINTMENTSHIPS.

Per line, Sixpence. Minimum charge, Eightpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

ON Thursday last the new sewerage works which have been constructed at Kyo, near Annfield Plain, were formally opened. Mr. J. E. Parker, A.M.I.C.E., who has personally supervised the construction of the works, explained the *modus operandi* to those present, and the scheme was found to act in a satisfactory manner. The cost of the work is £1,600, the contractor being Mr. Geo. Robson, of Newcastle, while the ironwork was supplied by the Grange Iron Company, Durham.

THE contract for the enlargement of the Whitehall Schools, Bristol, has been placed in the hands of Messrs. Love and Wait. The estimated cost is £1,700.

Trade and Commerce.

WE shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in THE BUILDERS' JOURNAL, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.

We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

Lawson's Patent Combination Set-square.—Mr. F. R. Lawson, Surveyor, of Market Street, Fenton, Staffordshire, sends us a celluloid Set-square which "works" at 45°, 52½° and 60° by the medium of slips cut through the material of an ordinary 60° Set-square. There is no question that the idea is extremely useful, but it appears to us that a little more care is necessary in the manufacture. We applied a match to the Set-square, and that Set-square is no longer in existence—perhaps Mr. Lawson will send us another for our Artist's use.

Leicester Building Strike.—The strike in the Leicester Building Trades, though now in its ninth week, so far as carpenters and joiners are concerned, shows no prospect of settlement. The plumbers are still locked out, and they decline to return to work on the terms offered, although promised all that they demanded within a week of resuming work. The builders, bricklayers, plasterers and slaters have up to the present declined to accede to the demand for a general strike, but all building operations are being seriously interfered with, and the employers threaten to introduce non-Union labour.

The Strike in the Building Trade at Stourbridge.—This strike still continues, and though the men have had a communication from the masters with an offer, it does not, it is stated, meet what the former want—viz., the fixing of a standard rate of wages for the Stourbridge district of 8d. per hour.

The "Landis" Band-Saw.—A trial of this new band-saw was made last Tuesday, with very satisfactory results. The saw-blade, which is 38 ft. long, 5 in. wide, and runs horizontally at 7,000 ft. a minute, is carried by two wrought-steel pulleys of special construction, 5 ft. in diameter. No india-rubber or other substance is used on the surface of these pulleys, the saw-blade running on the metal rim, with the teeth projecting sufficiently beyond the edge of the pulley to clear the set. The saw pulleys are carried on a strong horizontal casting furnished with the necessary adjustment for altering the distance between the pulleys to suit saws of different lengths, and to vary the tension on the saws. The casting on which the pulleys are carried rises and falls on two large screwed vertical columns, which are made to rotate by self-acting gear for the purpose of varying the height of the saw. The position of the saw is indicated by a disc immediately facing the operator, the whole control of the machine being immediately within his grasp, without his having to alter his position. It is claimed for this machine that it is a better and more rapid board-sawing machine than any other in the world, and that it will satisfactorily carry out certain operations hitherto looked upon as impossible on the band-saw.

General Line of Buildings Case.—At the North London Police-court, Mr. Thomas Pryor, a builder, of Stoke Newington, appeared before Mr. Lane, Q.C., on the 20th and 27th ult., in answer to a summons at the instance of the London County Council, for having erected a building on the northern side of Prince George Road, Stoke Newington, beyond the general line of buildings. Mr. Chilvers, from the solicitor's department, represented the Council, and Mr. Macmorran, barrister, appeared for the defendant. Mr. Chilvers stated the summons was taken out under section 75 of the Metropolitan Management Act, 1862, and was for an order for the demolition of so much of the building complained of as had been erected beyond the general line of buildings as defined by the superintending Architect, and subsequently confirmed by the Tribunal of Appeal. The owner of the building having appealed against such certificate, which, however, was duly confirmed, and he called Mr. Dovaston, a Surveyor in the office of the Council, who proved that in August, 1893, the Council approved plans for the formation of Prince George Road, that on such plans certain old houses were shown by a yellow colour, which it was stated by a note on the plan would be taken down within three months. This, however, had not been done, but the defendant in October last year commenced the erection of a building on the site of certain of the old buildings, and was covering not only the site of the building but the garden at the rear and the forecourt also. The old building was now standing in advance of the general line, and the new building when completed would also be about 7 ft. in advance of the general line of buildings, for which no consent of the Council had been obtained. For the defence, Mr. Macmorran contended that as the Tribunal of Appeal had not only confirmed the certificate, but also determined that the building was being erected on land which came within the exceptions contained in Sec. 33 of the London Council General Powers Act, 1893, the Superintending Architect could not define the general line of buildings under Sec. 75 of 25 and 26 Vic., Cap. 102, and he further contended that as the building complained of was being erected on the site of an old building with grounds attached, it came within the decision of the well-known case of "Lord Auckland v. the Westminster

Board of Works," and he asked for the summons to be dismissed. In reply, Mr. Chilvers submitted that, notwithstanding the finding of the Appeal Tribunal, the proceedings were properly taken, because the appeal from the Architect's certificate under sec. 28 of the London Council General Powers Act, 1890, and not sec. 33, as contended for by counsel for the defence, and he further submitted that this case was distinguishable from Lord Auckland's case, inasmuch as there was only a small Court-yard in the rear of the building in that case, and in the present there was a Forecourt of considerable length. The magistrate, in giving his decision, said he agreed with the argument put forward by Mr. Chilvers, that the appeal from the certificate of the Architect defining the general line of buildings was under section 28 of the Act of 1890, and not under section 33, and that the finding of the Tribunal of Appeal as to the land coming within the exceptions contained in section 33 did not apply to the present case; but, on the other hand, he was of opinion that the case was one which came within the decision of the High Court in "Lord Auckland v. the Westminster District Board of Works," and he should, therefore, dismiss the summons with £7 7s. costs. Upon the application of Mr. Chilvers, the magistrate stated he was quite willing to state a case for the High Court.

THE new Pier at Rottingdean, erected by the Brighton and Rottingdean Seashore Electric Tramroad Company was formally opened by the Chairman of the Company (Mr. E. O. Bleackley) on Thursday afternoon.

THE Bromyard Board of Guardians has chosen a site for the proposed Vagrant Wards, and has decided to advertise for plans for accommodation for forty vagrants.

At a cost of £15,000, for which the Messrs. W. H. and J. D. Lever have made themselves responsible, a new Congregational Church to accommodate 600 persons is being erected in Blackburn Road, Bolton.

THE new floating Cholera Hospital on the Tees was recently opened by the Tees Port Sanitary Authority. The Hospital is situated near the mouth of the river, and has been constructed at a cost of about £10,000. The building is erected on ten floating cylinders, 86ft. 6in. by 6ft. The administrative building is in the centre, and on either side two commodious blocks are admirably arranged for the accommodation of patients.

A NEW Church Mission Hall and Sunday Schools for St. Peter's, Middlesboro', were opened by Lady Dixon, on Wednesday last. The Mission Room will accommodate 400 persons, and the Schools 500 children. £1,000 has been raised towards the £1,400 required for building and furnishing.

THE Board of Guardians at Horncastle, Lincolnshire, has determined to expend some £800 or £900 in improving the Board Room, and other alterations.

A NEW departure, and an excellent one, is recorded in New York, and it has been taken, moreover, by a member of a very objectionable class—the American millionaires. The gentleman in question had a magnificent house built for him, and when it was finished, he wished to recognise the services of the workmen who had built it. He therefore gave an invitation to dinner to every man who had worked on the building, and he invited his own friends to meet them.

IN order to test the Belleville type of water-tube boilers, which have been recently criticised in Parliament, and which it is proposed to use in the new battleships *Powerful* and *Terrible*. The Admiralty have ordered the *Sharpshooter* torpedo gunboat to leave Devonport on June 17. She will proceed to Gibraltar, and will be worked for long periods at various powers ranging from 1,500 to 3,000 indicated horse power. These trials will be exhaustively reported upon.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BECCLES.—For converting old chapel, Peddler's-lane, Beccles, into dwelling-house, erecting new outbuildings, and relaying drains, &c. Mr. Arthur Pells, architect:—

Hindes, E. W.	...	...	...	£200	0	0
Calver, Arthur	...	...	...	186	0	0
Johnson, G.	...	...	...	171	14	0
Dunn, G. (accepted)	...	...	...	155	0	0

[All of Beccles.]

BECCLES.—For new business premises for the Beccles Working Men's Co-operative Society. Mr. Arthur Pells, F.S.I., architect, Beccles:—

Hindes	...	...	...	£2,490	0	0
Hawes, G. E.	...	...	...	2,090	0	0
Youngs, J., and Son, Norwich*	...	...	...	2,063	0	0

* Accepted.

[Surveyor's estimate, £2,150.]

ROBT. ADAMS, 67, NEWINGTON CAUSEWAY, LONDON, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self
Compensating

SPRING HINGES

Guaranteed to
last longer and
work better than
any hitherto made.

CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to
and closes from
the angle of 135°

Fig. 3 is the new
Single Action
Spring. It opens to
and closes from
the angle of 180°,
i.e., "wide back."

THE
FIRST SPRINGS
EVER PRODUCED
WITH
THESE GREAT
ADVANTAGES.

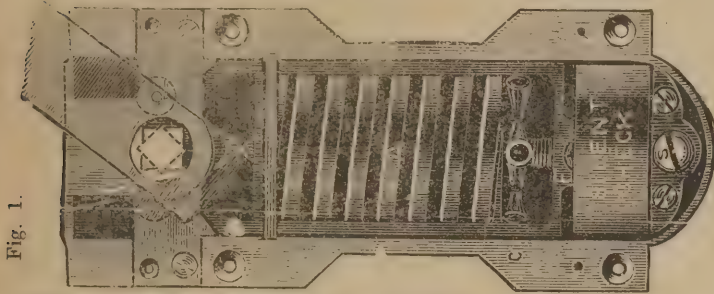


Fig. 1.

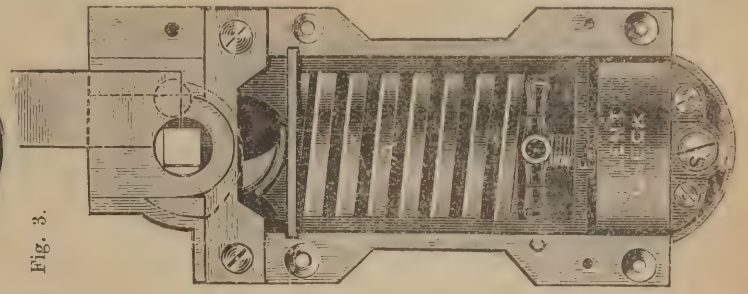


Fig. 3.

BRICKS 2½ or 3 inch PRESSED BRICKS Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or
Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

BELPER.—For additions to the school (Pottery), for the School Board. Mr. S. R. Bakewell, architect, Belper. Quantities by the architect:—
Wheeldon Bros. ... £620 0 0
Hingley, A. ... 600 0 0
Bodell and Son ... 590 0 0

BIRMINGHAM.—For the erection of the Church of St. Mary and St. John, George-street, Balsall Heath, for the Very Rev. John P. Dowling, M.R. Mr. Arthur Vicars, architect, Somerset Chambers, 151, Strand, London:—
Loughton ... £3,675 0 0
Wilcox ... 3,706 0 0
Rowbotham ... 3,246 0 0
Moffat ... 3,204 0 0
Harley (accepted) ... 3,120 0 0

BRIDLINGTON QUAY (Yorks).—For the erection of a corn mill, for Mr. W. T. Lowson. Mr. J. Earnshaw, architect, Wellington-road, Bridlington Quay:—
Postill and Mush ... £559 0 0
Rennard, J. ... 499 0 0
Sawdon, J. ... 490 0 0
Gray, T. (accepted) ... 457 16 0

[All of Bridlington Quay.]

BRISTOL.—For additions, &c., to Baptist Chapel, Old King-street. Mr. H. J. Jones, architect, 12, Bridge-street, Bristol:—
Cowlin, W., and Son ... £3,750 0 0
Walters, E. ... 3,600 0 0
Wilkins and Gosling ... 3,534 0 0
Eastbrook and Sons ... 3,425 0 0
Davis, J. E. ... 3,418 0 0
Wilkins, R., and Sons ... 3,395 0 0
Humphreys, G. ... 3,337 0 0
Wilkins, G. H. ... 3,268 0 0
Jove and Waite ... 3,249 0 0

* Accepted, being the lowest on schedule of variations.
[All of Bristol.]

BULWELL (Notts).—For the erection of a grocery store, for the Bulwell Co-operative Society, Limited. Mr. H. Harper, architect, Tavistock Chambers, Nottingham. Quantities by the architect:—
Tilley, R. ... £985 0 0
Gell and Son ... 793 0 0
Cuthbert, T. ... 770 0 0
Bell, A. G. ... 770 0 0
Dove, J. ... 741 0 0
Forster, J. Bulwell, (accepted) ... 735 5 6
White, J. ... 719 0 0
Caunt, A. ... 709 0 0

CARDIFF.—Accepted for the formation of roadways and sewers Surrey-street, part of Landsdown-road, and completion of Norfolk-street, for the Canton Property Co., Ltd. Messrs. Veall and Sant, architects:—
Frank Ashley ... £543 5 0

CARDIFF.—Accepted for the erection of chimney-stack, 120 ft. high, at Messrs. Spillers Nephew's biscuit factory, Cardiff. Messrs. Veall and Sant, architects:—
Symonds, W., and Co. ... £553 0 0

CARDIFF.—For extensions to brewery and bottling stores, County Brewery, Crawshaw-street, Cardiff, for Messrs. Williams, Hancock and Co., Ltd. Messrs. J. P. Jones, Richards and Budgen and Charles C. Jones, architects, Cardiff:—
Stephens, B. stow and Co., Ltd. ... £13,250 0 0
Knox and Wells ... 13,105 0 0
Davies, Henry ... 12,987 0 0
Allan, James ... 12,947 0 0
Lathey and Co. ... 12,898 0 0
Turner, E., and Sons, Cardiff (accepted) ... 12,648 0 0
Berridge, A. ... 12,458 0 0

CASTLEFORD (Yorks).—For paving, &c. Cambridge-street, for the Urban District Council:—
Taylor, J. ... £1,366 4 9
Eastwood Bros. ... 1,321 2 10
Speight, J. P. ... 1,244 14 3
Brunton, A., and Son ... 1,214 5 3
Speight, D. ... 1,174 9 0
Barracough, H. ... 1,169 11 8
Lane, Thos., Lincoln (accepted) ... 1,162 13 0

COVE (Hants).—For erecting three pairs of cottages for Mr. A. Hitchcock. Mr. W. E. Trevena, architect:—
Finch, Frimley ... £1,035 0 0
Murrell, Blackwater (accepted) ... 1,020 0 0

CROYDON.—For house in Coombe-road, Croydon, for Mr. C. T. Moore. Messrs. Berney and Son, architects, 104, George-street, Croydon:—
Bullock, A. ... £2,360 0 0
Holt, W., and Sons ... 2,295 0 0
Jerrard, S. J., and Sons ... 2,160 0 0
Horrocks, J. ... 2,105 0 0
Bryan, G. E., and Son ... 2,064 0 0
Page, S. ... 2,055 0 0
Huntley Bros. ... 2,011 0 0
Hanscombe and Smith ... 1,998 0 0
Smith, W., and Son ... 1,998 0 0
Smith, J., and Son ... 1,995 0 0
Marriage and Co. ... 1,995 0 0
Hubbard ... 1,995 0 0
Bullock and Co. ... 1,989 0 0
Wawman, I. ... 1,960 0 0
Saunders, E. J. ... 1,900 0 0
Syme and Duncan ... 1,825 0 0
Mid-Kent Building Co. ... 1,787 0 0
Barker, D. W. ... 1,779 0 0
Burnard, E. J. ... 1,775 0 0

EAST HAM.—For the erection of three shops and dwelling houses at East Ham, Essex. Messrs. Foulsham and Herbert Riches, joint architects, 3, Crooked-lane, E.C., and Bromley-by-bow, E.:—
Hosking, G. J. ... £1,776 0 0
Norton, W. M. ... 1,738 0 0
Gregar and Son ... 1,645 0 0
Osborn, T., and Son ... 1,599 0 0
Salt, S. (accepted) ... 1,574 0 0

FARNBOROUGH (Hants).—For the erection of a pair of villas, Hilfield Estate, for Mrs. Pritchell. Mr. W. E. Trevena, architect, Farnborough:—
Mundy, Basingstoke ... £979 0 0
Murrell Blackwater ... 878 10 0
Kemp, Frimley ... 785 0 0
Smith, Farnborough ... 780 0 0

If Tile Roof.

FARNBOROUGH (Hants).—For erecting three houses, Park-road, Farnborough. Mr. W. E. Trevena, architect, Farnborough. G. Murrell, Blackwater (accepted).
Grimwood and Son ... £8,91 0 0
Parmerter ... 7,919 0 0
Kenney, G. A. ... 7,748 0 0
Parkington and Son ... 7,700 0 0
Girling and Coe ... 7,595 0 0
Kerridge and Shaw ... 7,547 0 0
Catchpole, E. ... 7,544 0 0
Bennett, F., Ipswich (accepted) ... 7,299 0 0

IPSWICH.—For the erection of school buildings, Bramford-lane, for the School Board. Mr. E. F. Bisshopp, architect, 32, Museum-street, Ipswich:—
Grimwood and Son ... £8,91 0 0
Parmerter ... 7,919 0 0
Kenney, G. A. ... 7,748 0 0
Parkington and Son ... 7,700 0 0
Girling and Coe ... 7,595 0 0
Kerridge and Shaw ... 7,547 0 0
Catchpole, E. ... 7,544 0 0
Bennett, F., Ipswich (accepted) ... 7,299 0 0

IPSWICH.—For the addition of a new chancel and other works at Holy Trinity Church, Ipswich. Mr. E. F. Bisshopp, architect and diocesan surveyor, Ipswich:—
Grayston, W. ... £2,347 10 0
Bennett, F. ... 2,220 0 0
Parmerter, S. C. ... 2,200 0 0
Girling and Coe ... 2,090 0 0
Roper, C., Ipswich (accepted) ... 2,038 0 0

CARTER & CO TILES MOSAIC FAIENCE Poole Dorset

IPSWICH.—For the addition of a new choir vestry, and other works, at St. Matthew's Church Ipswich. Mr. E. F. Bisshopp, architect and diocesan surveyor, Ipswich:—
Dale, E. G. ... £628 10 0
Thwaites, T. ... 620 0 0
Girling and Coe ... 614 0 0
Grayston, W. ... 605 0 0
Grimwood and Sons ... 600 0 0
Bennett, F. (accepted) ... 570 0 0

[All of Ipswich.]

LONDON.—For repairs and decorations at the "Gallions" Hotel, Royal Albert Docks, for Messrs. Truman, Hanbury, and Buxton, Ltd. Mr. Bruce J. Capell, architect, 70, White-chapel-road, E.:—
Maddison ... £525 0 0
Snewin ... 448 0 0
Thompson and Beveridge ... 372 0 0
Vigor and Co. ... 293 17 6

LONDON.—For repairs and decorations at the "Central Buffet," Royal Albert Docks, for Messrs. Truman, Hanbury, Buxton, and Co., Ltd. Mr. B. J. Capell, architect, 70, White-chapel-road, E.:—
Maddison ... £359 0 0
Thompson and Beveridge ... 270 0 0
Vigor and Co. ... 190 0 0
Snewin ... 180 0 0

LONDON.—For erecting warehouses, corner of Goswell-road and Lever-street, E.C., for Messrs. Rowley and Brock. Messrs. Lawson Bros., architects:—
Smith ... £5,590 0 0
Blighton ... 5,149 0 0
Wynne ... 4,650 0 0
Beer and Cash ... 4,573 0 0
Fortescue ... 3,980 0 0
Redhouse ... 3,630 0 0
Seth Grist Co., Ltd. ... 3,498 0 0

LONDON.—Accepted for continuing and completing the remainder of the shops and flats at Electric Avenue, Brixton, S.W., for Mr. John Fyle. Mr. W. H. Gibbs, architect, 5, West Kensington-terrace, W. Quantities by Messrs. John Waldram and Son, 17, Buckingham-street, Charing Cross W.C.:—
Higgs, F. and H. F., Loughboro Junction ... £11,187 0 0

LONDON.—For the execution of tar-paving at the Work-house, for the Edmonton Union Guardians. Mr. T. E. Knightley, architect, 106, Cannon-street, E.C.:—
Butson and Roberts ... £410 5 0
Constable and Co., King William-street, E.C. (accepted) ... 332 7 0
Asphaltic Limestone Concrete Co., Ltd. ... 327 0 0
Smart, J. ... 320 0 0
Hobman and Co.* ... 294 0 0

* Own Specification.

LONDON.—For an additional story to the Nurses Home, at the Infirmary, Marlborough-road, for the Guardians of the Poor of the Parish of St. Mary Abbots, Kensington. Mr. Thos. W. Aldwinckle, architect:—
Head, W. B., and Sons ... £1,855 0 0
White, T., and Son ... 1,522 0 0
Neal, G. ... 1,518 0 0
Johnson, W., and Co., Ltd. ... 1,490 0 0
Williams, R. E., and Sons* ... 1,480 0 0

* Accepted.

The Builders' Journal.

Vol. I., No. 18.

Tues., June 11, 1895.

ILLUSTRATIONS.

The Amsterdamsche Poort, Haarlem;

Drawn by F. T. W. Goldsmith 273

Rockleigh, Exeter: F. T. W. Goldsmith, Architect .. 274

A Porch: F. T. W. Goldsmith 275

Moss Side School Board:

Woodhouse and Willoughby, F.R.I.B.A., Architects 277

A Sketch in Alkmaar: By F. T. W. Goldsmith 279

House at Stockport for Mr. Thomas Lees, J.P.:

G. H. Willoughby, Architect 280

The Blackburn Technical and Trade Schools:

Woodhouse & Willoughby, Architects 281

Rochdale Technical School:

Woodhouse & Willoughby, F.R.I.B.A., Architects 283

CONTENTS.

A Great Reputation 273

Wanted: A Strike Preventor 274

The Work of the A.A.: A Chat with

F. T. W. Goldsmith 274

Destruction of the Spina Chapel 275

Bricks and Mortar 276

Men who Build, No. 16.—

Mr. George H. Willoughby 280

Characteristics of Celtic Art 282

Sculpture Decoration of St. George's Hall,

Liverpool..... 282

The Progress of Electric Traction 282

The Advantages of Semi-Circular Porticoes 283

A Marine Lake for Rhyl 283

The Approach to Westminster 284

Sculpture: A Comparison 284

Thirty Thousand Tons of Sulphuric Acid

per year 285

The State of Kirkstall Abbey..... 286

Society Meetings 287

The Builders' Journal Competitions 288

Trade and Commerce 288

"A Great Reputation."

A woman, Mrs. Owen by name, and a cultured woman by instinct we have no doubt, has taught a lesson at Ipswich to her fellow Guardians (all of whom are of the sterner sex), which we hope they and all Boards of Guardians in other districts of the kingdom will not readily forget. The details of this lesson were published in our last issue, but they bear recapitulation as the sequel is not quite matured. The Board some time ago decided upon building a new Workhouse, and naturally, as Boards do, decided upon a public Architectural competition. The worthy Guardians then selected six out of the total number of designs sent in. Then their capacity of Architectural judgment becoming exhausted, they wrote in despair to the President of the Institute, begging him to advise a competent assessor to them. The President recommended Mr. Charles Barry, himself a past President of the Institute, and Mr. Barry offered to assess the respective merits of the drawings for a fee of 50 guineas and travelling expenses. Now the travelling expenses to Ipswich, as Mrs. Owen tersely pointed out to the Board later in their proceedings, cannot possibly be a very alarming matter. Mr. Barry is not what we should call an exacting man; no doubt he would travel first-class, but as he professes no personal friendship with Royalty, or any luxury of that sort, the ordinary fare of an ordinary decent individual could not well be exceeded. However, it was the travelling expenses that did it. Whether the Board, knowing the charges of the Ipswich Hotels let imagination get the better of them, is not stated, but rather than risk the expanding capacity of those travelling expenses, it passed a resolution that some of the local Architects, not engaged in the competition, should be asked to give "a lump sum for the job." Messrs. Brightwen Binyon and W. Eade, both Fellows of the Institute, declined to enter into a competition of fees with

Mr. Barry, but they did not object to do the work for the sum he had stipulated without any extraneous charges. The ordinary illogical school boy might imagine that this was a very keen competition in the way of

they could have expected from "gentlemen," moved that they be appointed assessors, we presume, because their fee was the same as Mr. Barry's, and a lord seconded the proposition. But there happened to be a

lady in the case, the Mrs. Owen before-mentioned, and she possessing a little more logic than her worthy vicar, pointed out to the enlightened Guardians that as they had consulted the President of the Institute and he had recommended an Architect of "great reputation" to them, and further, as his fee was not excessive, nor larger than the two local men wanted between them, there was no earthly reason why Mr. Barry should not be appointed, especially as his travelling expenses "could not be much." Mr. Borrett, a local builder, and evidently a man of pluck, supported his colleague, and between them they routed the vicar and the lord, and the one other guardian who voted in the minority. Mrs. Owen's motion was carried by a majority of twenty. The point of this matter is a very great one, although in a nutshell, and resting with Messrs. Binyon and Eade. We take no notice of the vacillating action of the Board of Guardians—Boards of Guardians and all kindred bodies will vacillate until the crack of doom—and beyond it; but professional dignity should have shown Messrs. Binyon & Eade the open path. Having made up their minds not to under-bid Mr. Barry in fee, they should have upheld the recommendation of the President of the Institute by strongly advising the Board to appoint Mr. Barry as assessor. But they did not do it, and therefore they assist this miserable Board of Guardians to impeach the dignity of the Institute, and to discard the recommendation of its President in a matter in which

they had previously sought his advice. A woman saved the situation—as women often do—and a "local builder," to both of whom the thanks of the Institute are due.



THE AMSTERDAMSCHÉ POORT, HAARLEM: DRAWN BY
F. T. W. GOLDSMITH.

fees, and the school boy might be right, but it does not matter. The Rev. Tozer, a working Guardian, touched by the magnanimity of Messrs. Binyon and Eade, which he characterised as the only answer

Wanted—A Strike Preventor! A superb opportunity for what is oftener described as "Party Politics" is going a-begging—and there would seem to be no bids. We suppose the Prevention of Strikes is too difficult a nut for the average Politician to crack, although he has got so far as mediating mildly in settlement. But we hold that *strikes should never be permitted to occur at all*; that they are the bane of industrial development, and that a little common sense and a decent share of self-control are alone needed to relegate such disastrous "wars" to the limbo of forgotten controversies. The Building Trade has had, for months now, a sword hanging over its head very much in the manner of the weapon of Damocles. There have been, within the last few days, distinct and dangerous notes of strife; the "men" we are told are now going to assume the "offensive," and we are prone to ask if there be a double meaning to the word; the masters are "firm," and all the stereotyped ineffectual peddling phrases of the daily Press speak of a "dead-lock." Why, we ask, should there be a dead-lock? Why cannot Governmental machinery be invented—machinery that would grind these differences, these disagreements to dust? Do the men absolutely and finally say that they, as Unionists, will not tolerate as fellow workman an artisan who is not a member of their Society? The artisan, surely, has a right to be what he please; if he be a Non-Unionist he takes his own risk of treatment, and his blood be on his own head. Again, if the advantages of the Union be so obvious, Unionism may depend upon it that all working men who do not happen to be drunkards or street loafers will join their Society. If they do not, there is something rotten in the state of Denmark. And that is just what quite a number of working men have come to believe. If they honestly believe this, if, as they say, these continued strikes and lock-outs have impoverished their pockets and punished their families, without a single penny of victory being won, then, surely, if this be the free country we brag of, they have a right to disassociate themselves with a Society which has damaged instead of protected them. We believe in Unions—Unions up to a certain limit; we should prefer to deal with Union men so long as they be willing workmen, but the defiant and dictatorial attitude assumed in these latter days, indeed, since the mischief of the New Labour and Much Language Movement began, is simply annihilating the business and setting up the backs of the employers. Building, at least, cannot afford a general strike; trade has not been too good, nor are the prospects too hopeful. A general strike will hit the building trade desperately hard. If Union men make themselves indispensable as workmen, there will be neither need nor demand for Non-Union labour. Non-Unionism is the thin end of a very big wedge, and that wedge will split Unionism itself if the organised Societies do not act more wisely. This is the view that should be pressed upon the more responsible men in the Union Movement. Meanwhile, if the working rules be bad, a day's impartial, judicial consideration would discover their iniquity. Why cannot we have, therefore, this temperate enquiry *before* we are plunged into the turmoil of a strike? We have locked the stable door after the horse is stolen so many times. If Government cannot do it, will not do it, or is too oblivious to think out a scheme of Arbitration Boards, if neither Party "tumbles" to the idea that here is a Party Chance and a Party Cry, then let a clever outside man save the situation before the work and the workmen have disappeared.

A CHAT WITH F. T. W. GOLDSMITH.

THE WORK OF THE A.A.

THERE are rooms in Verulam Buildings, Gray's Inn—of the Historic and Antiquarian association of which I noted one of your contributors had something to say last week—looking down upon the turmoil of tramcars and traffic, with a ceaseless sense of modern life, but there are other rooms with wide windows, and the modester glass of forty years ago. Shoot high one of these windows, and you might be away in the heart of somnolent England; living in some Cathedral Close, some Dean's Yard, within shadow of a Minster, within sound of vibrant bells, unclashed by the roar of a city. It is so swift—from that red-painted, yellow-painted, green-painted stream of tramcars to the green swarded, tree shadowed, turf—it might be a dream.

Cool greys and browns linger upon the walls of the Inn; wonderfully cool and quiet with the sunlight over the ridge-roof making a hard hot line where it strikes the grass—an edge of hot light, trying to the eyes this June weather. It is delightful at high noon to look at this grey corner where as many men as can get chambers find time to smoke a cigar and forget London for half-an-hour, but it is still more delectable when the trees grow soft in the pearl greys of early night and one chimney-pot glows in the westering sun. You expect then to hear the bells, not as Matthias did—with horror—but with a sense of harmony and Evensong and rest.

Mr. Goldsmith has such a room, so have Mr. Bodley and Mr. Garner, "so many water-spouts distant" on the other wing that helps to make the corner cool, and quite a host of fellows struggle with their window-boxes in decent rivalry, or play tennis with disregard of of all Law and Equity, and a full determination to win. And it is no lie to say that this turf is some of the finest in London, and if your windows lend you no sight of Brick and Mortar you are yet cloistered with a country seclusion in the very thralldom of London town. It is the place for Architects really, though lions and lambs of the Law swarm, and, in fact, even an outsider would be content to share, I do not doubt, the hallowed fragrance of this Inn.

It was to see Mr. Goldsmith and to draw a little of his enthusiasm that I visited the somewhat ungodly rooms of the Architectural Association in Great Marlborough Street, where Architecture may be said to be hiding a diminished head, but I was glad to begin again in Verulam Buildings, where air and atmosphere were right and there was a comfortable chair for one's back—without disparagement to Great Marlborough Street, W.

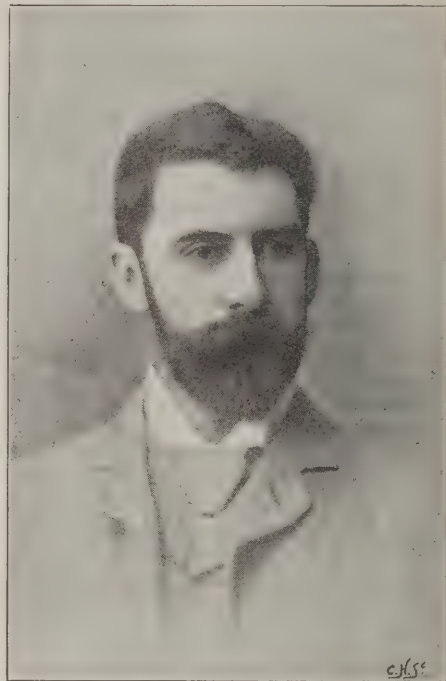
There is some Spanish blood, now far removed, in F. T. W. Goldsmith's veins, and this still knows how to get fiery and enthusiastic, "sudden and swift in quarrel" perhaps—hopeful and eager in enterprise. He looks a little Spanish also, and he is very eager to range a whole series of subjects at once. Thirty-six years ago he was born—at Calne, in Wiltshire—and I have noticed that certain Wiltshire men, making almost a type, have this oval swarthy face, so un-English, suggesting the "olive" of either Piedmont or Pyrenees.

It was at "general Architectural work"

that he was grounded with that excellent man, E. A. Lansdowne, of Newport, who guided him well and grounded him even better. By-and-bye, there came the customary sketching tour, without which no young Architect is complete—Paris, of course, and here and there in nooks and corners. He did his classes and lectures

in London also, and in the outer office of Verulam Buildings hangs a Certificate gained in the Old Voluntary Examination (Class of Proficiency), one of the last granted, and of which he is proud. Mr. Goldsmith has been recently appointed a Vice-President of the A.A. He was made an Associate of the R.I.B.A. in 1883.

Mr. Goldsmith has a passion for Arts and Crafts, and it was this, no doubt, led him to that queer School at Bushey, where Herkomer lords it not to the satisfaction of everybody,



and not without some keen controversy as to the method of his Art. Richardson, of Boston, designed the front of the house at Bushey, and Goldsmith worked at the interior arrangements, but, possibly, the "glory" was not even "reflected"—it is so difficult to apportion credit in Art.

"The chief work of the A.A.," said Mr. Goldsmith, "lies in the Studio and in the proper encouragement of volunteer work. The Voluntary Classes—survival of the old Water Colour Class—and the Discussion Classes very properly go hand in hand with the paid teaching work. Volunteer help, and the lectures



ROCKLEIGH, EXETER: F. T. W. GOLDSMITH, ARCHITECT.

and classes by paid instructors, all tend to the achievement of our aim, which, pure and simple, is to be able to turn out good Architects."

"Can good Architects be turned out?"

"Well, perhaps not—unless the material be there, but there can be no doubt but that a young student is either made or marred in

training. The A. A. aims at making him conscientious and enthusiastic. The Advanced Class of Construction, which languished years ago so much that only two or three students attended, has been re-invigorated, and now we have some thirty to forty present. I think it a pity that the old Class of Design was abandoned. No. 1 and 2 Divisions of our Curriculum are very successful but the R.I.B.A. might consider our Classes a little more than it does. We clash in holding our respective Classes, and with the inevitable result. I think everybody in the Profession ought to work for and with the A.A., and we have one cardinal rule, a good one I think, that *everyone* should share the credit. It is the *con amore*, the spirit of comradeship that we want to create among Architects and Students, the love of their Profession, and a sense of Brotherhood. Some of the best of all friendships are made at the A.A."

Mr. Goldsmith said that with conviction and conviction is everything in friendship.

"It is true, I am afraid, I find little sign of improvement in the bulk of Architectural Students; absolutely no enthusiasm, except in a few who are going to make their way and perhaps a name, and no desire to work in small competitions. I can remember the time when a little competition set the whole of us youngsters agog; it was hailed with eagerness, and one had ideals and outlines for big buildings such as the World had never seen! But the attitude of men is changing—it may be the effect of competition—from the aspiration to excel to the determination to make a living. Architecture will suffer in the process. There is more of the commercial spirit in the young students of to-day. It is just possible that the Revival of Design may inculcate enthusiasm for Art and Craft work which, to my mind, has been sadly neglected or overlooked. It is our intention in future to extend our curriculum as far as our funds will permit us, in the development and strengthening of studio work, and in arranging for classes in handicrafts. The A.A. should certainly do something in this way. I have spent many hours in a blacksmith's shop indulging a little 'bent' in iron and metal work, and the pleasure to be derived from such work is incalculable. Modelling also the A.A. may take up in view of the recent expressions of opinion upon the merits of models, and we want to strengthen our Curriculum all round. We want a new building also, a building worthy of Architecture, and I should like to see us starting this work, improving our Library, extending our influence, and promulgating all the enthusiasm we can. I have been Hon. Secretary of the A.A. for four years; two years under Mr. Gale as Junior and two years as Senior with the help of Mr. B. F. Fletcher, and I should like to say how much I am indebted to them, and to the Assistant Secretary, Mr. Driver, for help, in what is really a rather difficult task."

"You ask me with regard to the 'rumoured revolution in Conduit Street?' I think we all must be a little careful at present; not committing ourselves too much, and what I say at all is in my capacity of private member, not as representative of the views of the A.A. The R.I.B.A., I take it, is entitled to respect, perhaps, rather one should say veneration, but it is not quite the hall mark it should be. I hold that a man to be a Fellow of the Institute should be a man to whom one, figuratively speaking, should take off one's cap; a sort of 'R.A.' With regard to the Examinations, I think these should be conducted on similar lines to the work of an Architect in practice; that is to say, the Examinations at present seem to me to be developed too much in the direction of Design without due regard to the working

details of practice. The element of practice, of what a man would do under working conditions should constitute the test of examination. Questions and problems should not be 'sprung' upon him. I should like it made clear that the A.A. maintains an attitude of utter independence from the R.I.B.A., that it is separate and distinct, with a common aim, perhaps, but that an inter-dependence—a mutual movement in progress and development might be possible, and is what we young men hope for. If such an inter-dependence could exist, we should soon foster a feeling of comradeship, well expressed in the phrase 'Brother Chips.' As for the bricks thrown at us 'young men of enthusiasm,' it is a truism that no Art or profession can do without its vitalizing influence. Mistakes are made by enthusiasts, no doubt, but a man who can hit can bear hitting back, and I am a great advocate for discussion. After you have had a discussion, hot and fiery if necessary, something results. The Institute accomplishes a

A. A. rooms, which are indeed "unworthy" their calling, ended in our both being agreed it was time Architecture had an abode dignified and distinct, in every way worthy of its achievement and its aim.

DESTRUCTION OF THE SPINA CHAPEL.

IT was some comfort to me, that second of May last (1872), at Pisa, to watch the workman's ashamed face as he struck the old marble cross to pieces. Stolidly and languidly he dealt the blows, down-looking—so far as in anywise sensitive, ashamed—and well he might be. It was a wonderful thing to see done. This Pisan chapel, first built in 1230, then called the oracle, or oratory—"Oraculum, vel Oratorium"—of the Blessed Lady of the New Bridge, afterwards called the Sea Bridge (Ponte a Mare), was a shrine like that of ours on the bridge of Wakefield—

a boatman's praying-place; you may still see, or might ten years since have seen, the use of such a thing at the mouth of Boulogne Harbour, when the mackerel boats went out in a fleet at early dawn. There used to be a little shrine at the end of the longest pier, and as the Bonne Espérance, or Grâce de Dieu, or Vierge Marie, or Notre Dame des Dunes, or Reine des Anges, rose on the first surge of the open sea, their crews bared their heads and prayed for a few seconds. So also the Pisan oarsmen looked back to their shrine, many-pinnacled, standing out from the quay above the river, as they dropped down Arno under their sea-bridge, bound for the Isles of Greece. Later in the fifteenth century "there was laid up in it a little branch of the crown of thorns of the Redeemer, which a merchant had brought home, enclosed in a little urn of beyond-sea (ultramarine), and its name was changed to St. Mary's of the Thorn." In the year 1840 I first drew it, then as perfect as when it was built. Six hundred and ten years had only given to the marble of it a tempered glow, or touched its sculpture here and there with softer shade. I daguerre-typed the eastern end of it some years later (photography being then unknown), and copied the daguerre-type, that people might not be plagued with its lustre. But the last quarter of a century has brought changes, and made the Italians wiser. British Protestant missionaries explained to them that chapels were inconsistent with liberty on the quay; and their own engineering missionaries explained to them that steam-power was independent of the Madonna. And now, in 1873, rowing by steam, digging by steam, driving by steam—here, behold, are a troublesome pair of arms out of employ, so the engineering missionaries fit them with hammer and chisel, and set them to break up the Spina Chapel. A costly kind of stone-breaking this for Italian parishes to set their paupers on. Are there not rocks enough of Apennine, think you, they could break down instead? For truly, the God of their fathers and of their land would rather see them mar His own work than his children's—J. RUSKIN.



A PORCH: BY F. T. W. GOLDSMITH.

good work, but it leaves much work untouched. It will be the duty of those engaged upon its administration to make the Institute serve the best, the vital interests of Architecture."

We talked of other matters, treading the while on the thin crusted surfaces of not a few volcanoes; of handicraftsmanship, of "temperament," of which Mr. Goldsmith has got his share; of "slogging" in crusades of conviction, and, perhaps, of generally setting half the Professional World by the ears or the heels—which ever metaphor be best.

And there were the excellent sketches, now added to our portfolios, to be reproduced time and time in this *Journal*, and the tracings and plans, and a grateful reference to Mr. Goldsmith's partner, Mr. E. J. Gosling, and much about London—its influence, the magnetism of it that is going to draw F. T. W. Goldsmith back from Lee.

And one more look at the green turf and the cool grey corner, and a later run round the

It was reported at the Council Meeting at West Hartlepool, on Thursday last, that the completion of the new Public Library there is expected in about two months. There is already gathered a large collection of books, including some valuable local volumes.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
June 11th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE new Lecture Hall and Library of the Imperial Institute has been designed to be occasionally used as a Lecture and Concert Room, and to afford additional accommodation for books and readers to that now comprised in the Fellows' Library and Reading Rooms. It has a floor space of 55 feet wide by 76 feet long, the south end being raised as a Gallery, and that, together with the Arcade on the western side, forms a considerable area, in which it is proposed to place bookcases, leaving the floor of the body of the Hall free for seating when the room is used as a Lecture Room. The Indian Conference Room, adjoining the Hall, and forming a portion of the main building, is decorated in colour from floor to ceiling sufficiently Indian in character to distinguish it from the Conference Rooms of the various Colonies. It is proposed to procure the furniture direct from India, made from special designs, which will be thoroughly Indian in style. The work has been carried out, from the designs of the Architect, Mr. T. E. Collcutt, by Messrs. John Mowlem and Co. The colour decoration in the Indian Room is by Mr. Almqvist, of the firm of Messrs. Shrigley and Hunt.

ARCHÆOLOGY, Natural History, Science and Art have each a Museum in London where their treasures are stored and made accessible to students. No accommodation for what is known jointly as "Arts and Crafts" has yet been provided, but a proposal will be submitted to the County Council for the permanent establishment of such an Institution on some central area. It is suggested, in the first place, that a special committee shall be appointed to formulate a scheme, which will then come before the Council for discussion. Already the authorities at Spring Gardens have shown their interest in museums by forming, at the County Hall, a small but interesting collection of relics obtained by workmen during excavating operations. The great revival of enthusiasm in "Arts and Crafts" should hasten this suggested treasure house and speedily result in a valuable addition to the permanent collections of the country.

A CASE of some importance was heard by the Leeds Stipendiary Magistrate, when the Leeds Steel Works Company (Limited) was summoned at the instance of the Corporation, for several offences against the Building By-laws—firstly, for erecting a chimney of other material than brick or stone; secondly, for erecting a chimney without notice; and, thirdly, for building contrary to plans. In a fourth summons, the Corporation asked for an order for the demolition of the chimney forthwith. The Town Clerk (Mr. J. Harrison), who appeared to prosecute, stated that in February of last year the defendants submitted plans, which were approved by

the Corporation, for a brick chimney, 90 feet in height, to be erected in connection with a boiler at their works at Hunslet. After putting in the footings, however, and raising the brickwork about two inches above the ground, they abandoned the work, and the present proceedings were taken in respect to the erection of another chimney of tubular iron, which was connected with the boiler, but for which no plans had been submitted. This latter chimney was only 40 feet high, and the smoke issuing from it constituted a nuisance to the neighbourhood. Mr. E. O. Simpson, who appeared for the defence, took an objection that the proceedings were out of time, urging that it was necessary for the Corporation to take proceedings within three months after the discovery by their officials that an offence had been committed, and not later than twelve months after such committal. After hearing the legal arguments on both sides, the Stipendiary said he would reserve judgment on the point.

THE stained glass windows just placed in position on either side of the west window in St. Mark's Church, Sheffield, in memory of Mrs. Favell, the late wife of Archdeacon Favell, are a distinct addition to Ecclesiastical Art in the city. In the south-west window, the incidents depicted are from the life of Mary Magdalene. The first light of the north-west window contains a representation of St. Thomas, and the centre light is typical of the first Easter night. The windows are from the studio of Messrs. J. Powell & Sons, London, and are believed to be the first this firm has executed for Sheffield.

A CORRESPONDENT writes: I went recently to Stonehenge, and came home shocked at such a scene of neglect and desolation. Many of the fine columns, some of them 24 feet long, are lying heaped one on the other on the ground, while most of those that are still standing are quite out of the perpendicular, and will soon follow the others, and the whole thing will then be nothing but a heap of stones. Can it be possible that we are going to allow the finest Druidical Monument in Europe to perish by neglect? We have more than one Archaeological Society in London, but is there no sentiment in the country or veneration for antiquity that would preserve Stonehenge from the destroying hand of time? It would not cost very much to raise some of these splendid monoliths from the ground and to restore what remain standing to the perpendicular.

ONE result of the Exhibition of Railway Appliances opened at the Imperial Institute, will be the introduction of some reform in ventilation, lighting, and warming. At present there is little choice between partial asphyxiation with closed windows, and draughts, combined with showers of soot and dust, with open ones. In lighting considerable progress has been made on some of the northern lines. Compressed gas seems to be the favourite. Electricity has been found to be uncertain in its present stage of development, though the time will come when this best of all illuminants will be called in to the service of the railway traveller. But there is a fine field for the inventor in the warming of carriages. Unless we are prepared to use the foot-warmer as the countryman did, and sit upon it, we are, as the Lord Chancellor said, scorched at one extremity and frozen at the other. One pleasing feature of the Exhibition is to be found in two or three inventions which reduce the danger to the shunter to a minimum, by means of an automatic coupling which can be worked from the permanent way or from the engine.

WEMBLEY PARK Tower—a mad affair to our thinking—is again in active progress,

and is rapidly approaching the completion of the first stage, which consists of the construction of a vast platform 190 or 200 feet from the ground. The gigantic framework upon which this platform is to be laid has long been a conspicuous object on the top of the hill in Wembley Park. The cross girders are now to be got into position, and the concrete floor formed. This floor will be of enormous area, as may be gathered from the fact that in the centre of it is to be a large Hall with a floor space of 20,000 square feet, a broad promenade running all round it. The original design contemplated also the building of an Hotel on this platform, with 90 Bedrooms. Whether that is likely to be carried out at present we are not informed. There are to be four lifts to this first stage and two staircases. One of the staircases is sufficiently advanced to permit of the ascent being made by it, and the lift guides have just been got into position. The complete Tower—if it ever is completed—is to run up six times as high as this floor, or thereabouts. About £90,000, we understand, has been required to finish this first portion.

MR. MORRISON'S dissent against the appointment of Messrs. Morris and Hunter as Architects for the extension to the Academy, Ayr, has been read before the School Board. Mr. Morrison contended that the matter should not have been settled at a private meeting of the Board; that as public men entrusted with public funds they were bound to secure the best plans; that it was an established principle in all public bodies that there should be some form of competition; that as most of the Architects in Ayr had received their education at the Academy, it was natural that they should have an opportunity of competing; and that by public competition there were secured the best brains and the best Architects.

AN experiment—with a view to ascertain the relative resistance, under pressure, of the hardest steel and the hardest stone—was recently made at Vienna. Small cubes, measuring 0.39 in., of corundum and of the finest steel were subjected to the test. The corundum broke under the weight of 118 cwt., but the steel resisted up to 844 cwt. The steel split up with a noise like the report of a gun, breaking into a powder, and sending sparks in every direction, which bored their way into the machine like shot.

PLANS for the new Cottage Homes for the pauper children belonging to Mile End have been adopted. The scheme provides for the erection on the ground acquired by the Guardians at North Weald, Essex, of 24 Cottages, Swimming Bath, a Gymnasium, Hall for entertainments and services, administrative buildings, &c. The estimated cost is £50,000.

THE only point in dispute is as to whether the Hall should be used for Church purposes only. In this event, Miss Lilley, one of the Guardians, offered to provide the whole of the interior fittings. The Board decided otherwise, holding that being parochial property they should not favour any sect, and that the utmost use should be obtained from the buildings.

WE regret to hear that the Queen's Head in Southwark, once the Crossed Keys, but rechristened at the Reformation, is to go the way of so many old hostelries. Seeing that in 1637 the Queen's Head was owned by John Harvard, afterwards the founder of the famous University that bears his name, it is strange that Americans have not stepped in to save it from demolition, by purchasing it with a view to the reconstruction of the venerable building on some appropriate spot, as a memorial of one of the few pious founders of whom they can boast. Failing their intervention, however, the ancient hostelry is doomed, and with it will pass

away another landmark of that mediæval London of which such sparse and scanty vestiges alone survive. The worm-eaten rafters and balustrades of its quaint old gallery will come down, and the dark and low ceiled sleeping-rooms that have housed so many generations of shadowy guests will be levelled to the time-worn stones of the courtyard.

A GIGANTIC project in the way of Bridge construction is about to be undertaken. The Hudson River Bridge Commissioners having accepted the plans for the great work, which is to cost 25,000,000 dols. The Bridge is to be built without supports between the piers, and will have a clear span of 3,100 feet. The elevation is to be such that the Bridge shall afford under any conditions a clear headway above the high water of spring tides of not less than 150 feet at the centre of the span. The endurance of the structure may to some extent be calculated from the fact that there will be six standard railroad tracks upon one level. The general type of the proposed Bridge will be a steel wire Suspension Bridge. The Towers at each end will be steel skeleton structures commencing at an elevation about fifty feet above high water, where the masonry piers end. The Bridge will be proportioned to carry, besides the dead load of the structure, trains weighing 3,000 pounds per lineal foot of track, covering all the tracks from Tower to Tower, at rest or moving slowly. This is certainly a country of astounding enterprises, but in the matter of bridge-making the Hudson River structure promises to completely eclipse all records.

At St. Mawgan on Thursday, the Bishop of Truro will reopen one of the most ancient and interesting ecclesiastical buildings in Cornwall. Associated with it are memorials of the old county families of Carminow, Trevelyan, Vincent, and more particularly the Vyvians. The exact age of the Church appears unknown, although the monks of Carminow rank among its earliest occupiers. On removing the wooden floors, old oak joists, several of them in splendid preservation, were found to consist of what the builders are satisfied were the top rails of the seats introduced by the monks. The ornamented tops, grooved for the insertion of blackboards and fitted with connecting pins, afford evidence that even in remote times practical ideas were entertained by those engaged in structural work. Beneath the wall of the South Transept, or Carminow Aisle, are supposed to be hidden Architectural treasures. Curious to know the meaning of a hollow sound when tapping the south-eastern wall, the builders removed the upper crust to discover a pretty little window with a circular head and tracery characteristic of the work of the ancients. The antiquity of the Church is further exemplified in the circular oak ribs supporting the roof, which have in some cases crumbled to dust. Another remnant of bygone days is the quaint St. Mawgan Cross, bearing traces of an inscription believed to be at least 900 years old.

By the employment of a new board made from wood pulp, which is of great elasticity

and toughness, a new "case" for bookbinding, made in one piece, is shortly to be put upon the market. It is expected that it will effect great saving in the cost of this department of book production. It is the invention of Mr. E. Frith, of Reigate. By means of machinery a series of minute corrugations is made in the arched portion forming the back to give it the necessary flexibility, and the hinges are formed along each side by two larger corrugations producing, it is claimed, an altogether stronger and more durable back than the ordinary cloth-bound book possesses. The folded, sewn, and backed-up sheets of the book to be bound are fitted into this case in the ordinary way. The material can, it is said, be printed upon in colours or gold with more effect than either paper or cloth.

The extensive new Wing of the Rotunda Hospital, Dublin, will shortly be handed over to the authorities of the Institution. Its Front, rich in terra-cotta, cannot be seen as yet to advantage, owing to the old Hospital buildings intersecting the view. The Wing will be known as the Plunket Cairnes Wing, in memory of the late Vice-President of the Hospital, who, with his family, was a contributor to the funds. Mr. Albert E. Murray, A.R.H.A., of Dawson

the two opens. When it is necessary to pass from the air-lock back to the shaft the iron door communicating with the face is closed and the pressure is thus maintained there. The men work inside an iron shield, which is driven forward by hydraulic pressure. Inside this shield a casing of iron is constructed in sections of 2 feet 9 inches at a time, and inside this there is one foot of brick and cement built. By some means or other the water from the river got into the air-lock, and the engineer and five labourers were drowned like rats in a trap.

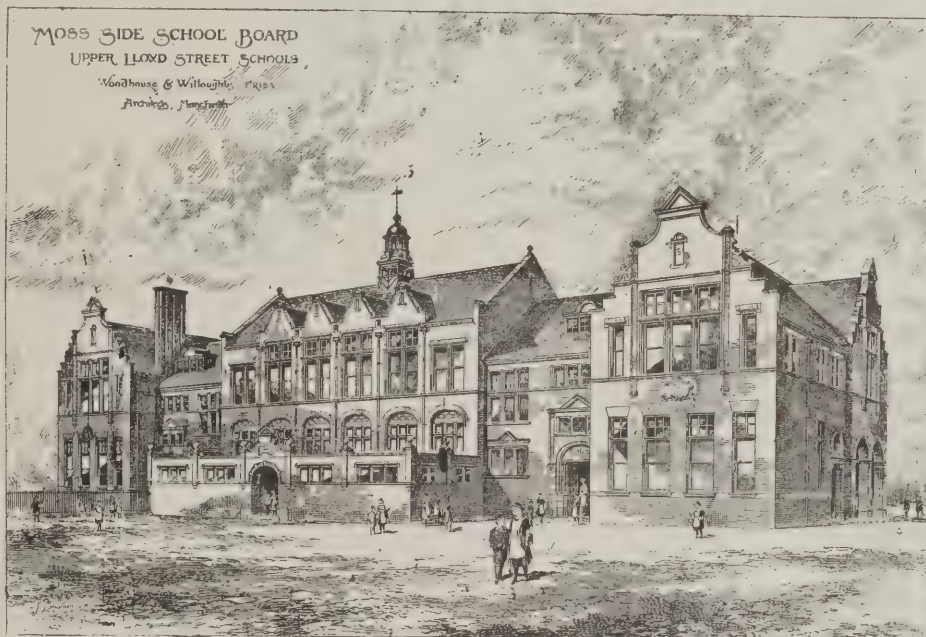
THE new Admiralty Buildings overlooking St. James's Park are close upon completion, and plans are in preparation for "Block No. 2," which is to occupy the ground now covered by dwelling-houses and other buildings in Spring Gardens, in the occupation of various Departments of the Admiralty. These, of course, will have to be swept away before the second block can be commenced, and while the Civil Servants now in occupation are awaiting the erection of their new quarters, they will be transferred to the old premises of the Royal United Service Institute, and some houses owned by the Crown adjacent to those premises. When the whole is done the Admiralty Buildings will form three sides of a square, and on the

fourth side will be a handsome covered Corridor running along the north side of the Parade Ground. That has not yet been taken in hand, and probably will not be till block number two is well advanced.

DURING some structural alterations to buildings in Old Bailey, near the scene of last year's big fire, an interesting discovery has been made by the men employed. A portion of the old London Wall, which ran between Ludgate and Newgate, has been brought to light, and is said to be in excellent condition. There is an archway 11 ft. wide, and 14 ft. high, lined with red bricks, but rising only 4 ft. above the present ground

level, showing that the original level of the City at that part was 10 ft. below what it is now. Although the archway has been discovered there is no indication of any roadway, and it is, therefore, supposed that the arch was cut in the original wall during the past 200 or 300 years. During recent years it has been used as a stable, and the alterations will necessitate its removal, but it is understood that before this is done an opportunity will be given by the owners to any who wish it to view the archway during the next few weeks.

It is now decided not, in 1900, to cover the Seine with an iron Bridge extending from the Avenue Montaigne to the Place de la Concorde. The plan adopted is to turn the river into the semblance of a grand canal at Venice. The principal entrance to the 1900 Exhibition will be in the Cours-la-Reine, near the Place de la Concorde. The portal is to be flanked with two buildings devoted to Education and Technical Instruction. The Fine Arts Palace will face the Esplanade of the Invalides and cover the Jardin de Paris. These buildings and a Bridge over the Seine will be the only permanent constructions. The Venetian Palaces on the river will be places of amusement. The



Street, is the Architect of the new buildings, which are in the Georgian style, with elaborate ornamentations in terra-cotta mouldings and window dressings, and with a couple of imposing pediments in terra-cotta facing the western side of Rutland Square, this portion of the building being well exposed to view.

In connection with the construction of a large Sewerage Tunnel under the river Yarra, at Melbourne, a disaster has occurred, reminding one of the difficulties connected with the formation of the Thames Tunnel. The river bed, instead, of being of firm material, proved to be sandy and treacherous, and it was soon found that all the resources of engineering would be required to carry the work to completion. When about 400 feet of the Tunnel had been driven an air lock was constructed. This consists of a strong brick chamber built across the Tunnel, into which compressed air is pumped from an engine on the surface, and compressed air is also supplied to the face beyond this in which the men work. The compressed air is used to hold up the face of earth and to keep the water back, and the air-lock is used to allow transit from the shaft into the face where the men work. When the pressure of air in the lock equals that in the face, the door between

Bridge will take a slightly oblique course, and have but one arch, the span of which will be of steel. Between it and the Pont de l'Alma will stand the Palace of Flowers, and the Palace of Social Science and of Congresses. Foreign exhibitors will be given stands in Pavilions and Palaces in the Champ-de-Mars, where the Agricultural Show is also to be held. A Chateau d'Eau with cascades is to serve as a vestibule to a Palace of Electricity bordering the Avenue de Suffren.

THE new Memorial Window, unveiled in St. Sidwell's Church, Exeter, and the original cartoon for which is in this year's Royal Academy, is a fine specimen of modern Art on glass, and is the handiwork of Messrs. Percy Bacon & Brothers, of London. In the tracery lights, which occupy the upper part, are angels bearing scrolls, upon which are inscribed the cardinal virtues,—prudence, temperance, fortitude, justice. The central and most prominent figure is that of St. Boniface, who was born at Crediton, A.D. 680, was educated at Exeter, and suffered martyrdom at Utrecht in his 75th year. The artists have shown him with a long blonde beard, and in full canonicals, holding the crozier in the left hand, whilst in the right he grasps a sword, which pierces an open book, upon which occur the words: "In erat principis verbum." On the dexter side light is a finely-drawn figure of St. Hieretha, a native of Swymbridge. She was contemporary with St. Thomas à Becket, and is represented bearing in her hands an exact model of the Western Tower of Chittlehampton Church, of which she was the foundress. On the sinister side is St. Sidwell, a woman with a face of pleading beauty. She bears in one hand her missal, and in the other holds a scythe, the emblem of her martyrdom. Above each figure is much delicate canopy work, and over this on either flank, are full length figures of angels—the one on the south bearing a starry crown, and that on the north a martyr's palm. The three subject panels, lower down, are cleverly treated. The drawing and colour of the window are excellent. The new stone work for the window was carried out by Messrs. Harry Hems & Sons.

THE Irish Antiquarian and Historical Society visited Durrow Abbey, near Tullamore, on Sunday. Considerable local public interest was manifested in the history and antiquities of the Magna Domus or great Monastery founded by St. Columba in the sixth century, and the celebrated "Book of Durrow," now happily preserved in the archives of Trinity College, Dublin. The richly sculptured Celtic Cross, popularly known as St. Columba's Cross, and the ancient "Holy Well," together with the quaintly-inscribed tombs in the old Irish language, many of which mark the graves of Irish chieftains and the monks sent over from Iona by the Apostle of the Picts and Scots formed a group of Columbian relics which could not fail to attract.

THERE is a body in France called the Society of the Friends of Trees. Its object is to promote planting, and especially the re-forestation of the hill-sides, in order to prevent the floods, which cause an annual average damage amounting to 80 million francs. This has slightly diminished within the last few years owing to re-afforestation. The Government would have to spend 160 millions of francs to carry out the work effectively. They only dispose of about three millions a year for the purpose. The Society supplements these efforts. Its members have planted about 600,000 trees.

CARPEAUX, the Sculptor, gave lessons in Art at the late Prince Imperial, who seemed at one time destined to become Napoleon the Fourth. The results of this

teaching were embodied in several works, most of which are now scattered, bearing the signature of Prince Louis Napoleon. M. Croisy, a French Sculptor, has, however, two of the Imperial memorials. One is a bust of M. Lemonnier, who was tutor to the heir of the third Napoleon, and the other, a statuette, represents a Grenadier, in the act of clasp ing a flag to his breast, as he defends it from an imaginary foe. Mr. Croisy's strong Republican sympathies have not prevented him from forming the resolution of presenting the Empress Eugénie, during her stay in Paris, with the bust chiselled by her son. The other statuettes and samples of the Prince's efforts in Art have, most probably, shared the same fate as the Palace of the Tuileries, where they were stored when the Franco-German war broke out. It was at the Tuileries, and during the intervals between his studies and drills, that the Prince received the valuable instructions of Carpeaux, who has left his master-touch on the plastic productions signed by his pupil.

THE fifth session of the International Railway Congress will be held this year at the Imperial Institute Buildings. Altogether 800 delegates are expected to attend; of these 600 will come from the United States, South America, Canada, Australia, New Zealand, France, Germany, Belgium, Russia and Italy. The Congress will be opened by the Prince of Wales, at 3 p.m., on June 26th, and at 10.30 p.m., there will be a reception by Mr. Bryce, the President of the Board of Trade. The meeting will be carried out on the lines of the British Association meetings, each section having a separate chairman.

A LIST has recently been published of the greatest canals in the World. The Imperial Canal of China is over 1,000 miles long. The Canal du Midi, connecting the Atlantic with the Mediterranean, is 148 miles long. It has more than 100 locks, and about 50 aqueducts. Its highest part is 600 feet above the sea, and it is navigable for vessels of upwards of 600 tons. The Great North Holland Canal is 125 feet wide at the water surface, 31 feet at the bottom, and has a depth of 20 feet. The Caledonian Canal of Scotland has a total length of 60 miles. The Suez Canal is 88 miles long, and the Erie Canal is 350 miles long; the Ohio Canal, Cleveland to Portsmouth, 332; the Miami and Erie, Cincinnati to Toledo, 291; the Wabash and Erie, 374; the Manchester Ship Canal, 35½ miles long.

PLANS have been passed for the largest block of business buildings ever built in Ayr. The ground forms a valuable site, with a frontage to Wellington Square of about 130 feet, and to Fullarton Street of about 110 feet, on which is to be erected buildings to be called the Wellington Chambers, with a height of four storeys, and a square Tower at the corner five storeys in height. It is intended to divide the floors into suitable offices for business people. Provision is made for passenger lifts, which will make the upper flats as valuable as those nearer the street level. The cost of the building is about £15,000. The Architect is Mr. Henry V. Eaglesham, Ayr.

THE equestrian Statue of Lord Straithnairn, which Mr. Onslow Ford, A.R.A., has constructed for the Straithnairn Memorial Committee, is cast in bronze from guns captured in battles in which Lord Straithnairn took part. The Statue is in course of erection in the open space at the top of Sloane Street, Knightsbridge. A more central site was sought for it, but the authorities concerned were not inclined to assist, so that the offer of the Westminster Vestry of the present position had to be accepted. On the whole, perhaps, the choice is not a bad one. The Statue will be a commanding object to all proceeding from Piccadilly westwards, while,

with the Wellington Memorial at Hyde Park Corner in comparatively close proximity, it is in congenial company. Mr. Ford is considered by Lord Straithnairn's old comrades to have produced an excellent work. The ceremony of unveiling the Statue has been fixed for June 15th, the anniversary of the capture of Gwalior.

WE hear that Battersea Parish Church, from the Turret window of which Turner sketched many of his wonderful sunset scenes, a Church which consecrated the marriage of William Blake to the daughter of a market gardener, and in which are many memorials by Roubilliac and others to the St. John and other families, to say nothing of the painted window which is said to date from the days of Queen Elizabeth, is sadly in need of repair, and the churchwardens are making an appeal for assistance in carrying out the necessary work. The present edifice was opened in 1771, and its copper Spire is a familiar feature on the banks of the Thames.

AT the provincial meeting and conference of the Sanitary Inspectors' Association, held this year at Worthing, an address that had been prepared by Sir Benjamin Richardson was read. In it he stated that the continued activity of the Sanitary Inspectors' Association and the increasing success of it was a source of great gratification to all who were seriously impressed with the cause of true sanitation. The great points which it seemed to him were essential to their continued progress were—first, unity of purpose and endeavour, so that they might as a body of men scattered widely through the country have a common object, insisting on their own proper recognition, remuneration, and consolidation. Their second great point was of an educational character. It would be advisable for them to have a School in which systematic instruction should be regularly carried out in the directions of their practical work. Short papers were afterwards read on "The Dwellings of the Poor," by the Deputy Mayor (Alderman R. Pipe) for Alderman Captain Cortis (Chairman of the Sanitary Committee of the Borough); "Death Rates," by Dr. Charles Kelly (Medical Officer of Health for West Sussex and Professor of Hygiene at King's College); "The Sanitary History of Worthing," by Mr. C. T. Gardner (Sanitary Inspector of the Borough); and "The Sanitary Inspectors' Association: a Review and a Forecast," by Mr. W. H. West (Vice-Chairman of the Council of the Association and Sanitary Inspector of Walthamstow).

THE seventh annual Exhibition of amateur Art work, promoted by the Artists' Guild, will be opened at the Royal Albert Hall on Nov. 4th next. Prizes are offered for embroidery, painting, photography, wood decoration, leather work, work in metals, and other artistic work. The Secretary of the Artists' Guild will be glad to give any information.

THE second outdoor meeting of the Dublin Sketching Club, recently held, was largely attended. The members assembled at the Club Rooms, Leinster Street, and proceeded thence by road to the picturesque valley of Glen Donagh, in the heart of the Dublin Mountains, where the varied and charming scenery affords many excellent subjects. One of the foremost objects of the Club is to promote and foster the study of Landscape Painting direct from Nature, and the popularity of these sketching expeditions is amply evidenced by the large and increasing attendance of the members. The party was in charge of Mr. C. J. McCarthy.

A LONG anticipated sewage scheme, which Messrs. Bramwell and Harris, of London, have been preparing for Derby, was laid before the Town Council on Wednesday. Considerable friction has arisen for some

time past between the town and county authorities on account of the borough sewage polluting the Derwent, and proceedings have been threatened, but now that some definite scheme has been drawn up the matter will, no doubt, be amicably settled. The report of the eminent firm of engineers mentioned is a very extensive and exhaustive one. It is proposed to erect a pumping station at Litchurch on the site of the present Litchurch sewage works, and to utilise as much as possible the existing sewers. This part of the scheme is estimated to cost £28,000. It is further proposed to treat the sewage in a series of underground tanks, the effluent being somewhere near the Borrowash Mills. The total cost of the scheme is put down at £82,000, and the cost of maintenance £7,500 per annum, £4,750 more than at present expended for a similar purpose.

A COMPETITION among Italian artists has been set on foot for the execution of a reproduction in marble of the alto-relievo of the Lion of St. Mark with the Doge Gritti. This alto-relievo formerly ornamented the terrace above the piazzetta of the Ducal Palace in Venice. The winner of the competition will be given two years in which to complete the work, the price for it having to be decided by a Commission appointed by the Italian Minister of Public Instruction.

IN the front of a house situated in the Faubourg de Shaerbuch, in Brussels, there is to be seen, half buried in the plaster, a cannon ball which was fired from a Dutch cannon at the period of the Revolution of 1830, and has ever since been permitted to remain. Recently it was determined to restore and refront the house, and the question arose: What was to be done with the Dutch cannon ball? It was at once determined to achieve the new fronting without disturbing it. Since then the ball has been repainted black, in strong contrast with the pale pink plaster around it, and provided with the simple commemorative date, "September 24th, 1830."

THE new Church and School buildings for one of the oldest Presbyterian congregations in Newcastle, and one of the largest in the denomination, will have one novel feature at least. The history of the Trinity congregation goes back to the days of the Puritans and the passing of the Uniformity Act. The Church has 500 members. The old Church in New Bridge Street was found inadequate, and a fine site in the new and central thoroughfare, Northumberland Road, was obtained, for new Church and Schools and Class Rooms adjoining. The total cost is estimated at £16,000, of which £12,000 is in hand. Messrs. Marshal & Dick, of Newcastle, are the Architects. A new feature in the plan is a screened Corridor running round the auditorium, from which the congregation obtain direct access to their seats, without passing through the Church. There are no pillars to obstruct the view of the pulpit.

THERE is no longer any reason to suggest that the unreliability of true fresco in this climate affords a sufficient excuse for the entire neglect of mural decoration of the better sort. The Gambier Parry process of "spirit fresco" has proved quite reasonably suitable and permanent; and a more recent device, which makes it possible to paint a design on canvas that is afterwards solidly attached to the wall, avoids the incon-

veniences inseparable from actual work on the spot. In the two Royal Exchange paintings, which we described in our last issue, the Gambier Parry process has been employed upon canvas, and this canvas has been put into its place after the Artist has in each case completed his labours. With this double safeguard against deterioration there seems no reason why these decorations should not remain in good condition for generations.

THE Bust of the late Lord Tennyson, executed in 1857 by T. Woolner, R.A., which was given for the purpose by the late Mr. C. Jenner, of Edinburgh, has now been placed on a pillar very near the grave of the poet in Poets' Corner, Westminster Abbey. The Memorial is exactly where it ought to be—looking directly, and from a very short distance, on the poet's gravestone, which was laid down by the Dean. The only rearrangement necessary was the shifting of the Tablet erected to the memory of Mr. Anstey, author of "The New Bath Guide,"

sisting of eminent statesmen and men of celebrity in Literature and the Arts and Sciences. The late Sir Robert could not afford to live at Drayton for a long time, and the present one is desirous to either let or sell it.

A LARGE stained-glass window was unveiled on Wednesday last, in Trinity Church, Stratford-on-Avon. The window has cost £600, and is situated at the east end of the Chancel, immediately above the Altar. It is the work of Messrs. Heaton, Butler & Bayne, London. The colouring is exceedingly rich and beautiful, and in marked contrast to the glass in the window which it supplants. The general subject of the new window is the "Adoration of the Crucified."

A MEETING of the Arts and Crafts Society of Ireland took place in Belfast, on Friday. It is hoped that this meeting will have effect in awakening a practical interest among the trades of the North of Ireland, and result in a large access of exhibition. This effort of

the Arts and Crafts Society of Ireland to raise the artistic excellence of craftsmanship comes none too soon. To anyone who cares for such things—on which so much refined pleasure in life depend—the poverty of design in Irish work is painfully apparent. That this was not so once, for instance in the last century, makes the fact the more deplorable. The blame attaches two-fold, to a careless, Art-less workman and an apathetic, Art-less public.

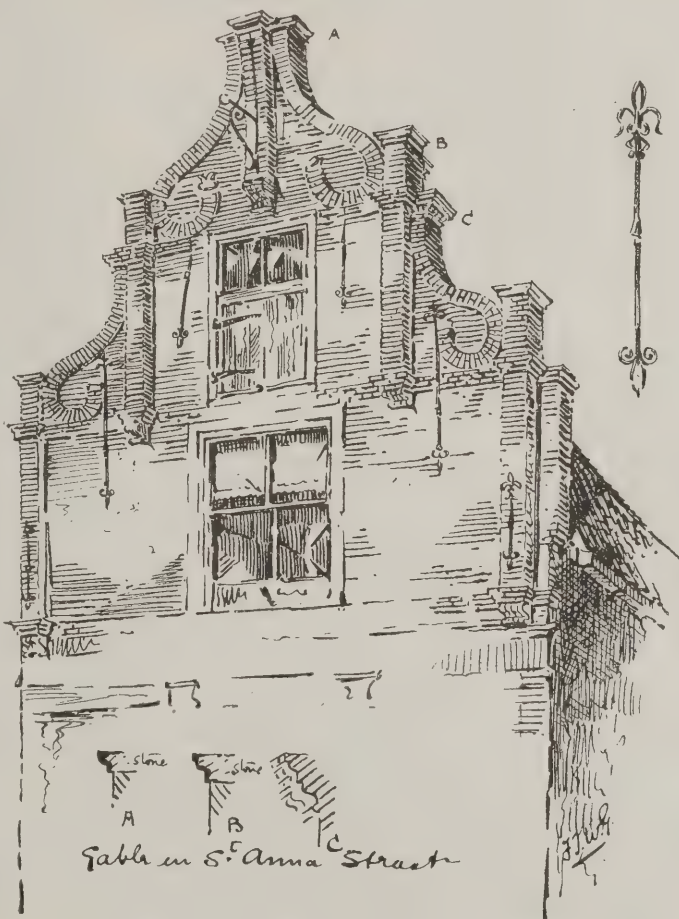
SIR J. E. MILLAIS recently had a surprise. Visiting at the house of a fellow artist who has just returned from Rome, he was asked to look at some sketches which the latter had brought back with him, and of which he was not a little proud, having picked them up for "an old song" in a curio shop at Rome. Sir John looking at them closely found that they were some sketches of his own, done in his student days. One of them was of his own father on horseback. Needless to say the owner of the sketches is still more proud of them now than he was before.

THE latest Brodingtonian addition to New York Hotels is the "Majestic." It is opposite the Central Park. It is 204 feet by 150 feet, by 165 feet high, contains 600 rooms, is fireproof, and cost four million dollars or thereabouts, and, certainly, for we have seen an illustration, it looks ugly enough to have cost that enormous sum. A

covered carriage-way runs right through it. There is a Winter Garden under glass, and a Summer Garden on the roof of 30,000 square feet.

DUNOON is to have its Highland Mary Statue after all. The financial results of the recent agitation have proved satisfactory enough to warrant the Committee to definitely instruct Mr. D. W. Stevenson, R.S.A., to carry out his design in bronze. The unveiling of the memorial, will take place on July 21st.

SHIPBUILDING in Cork Harbour is now becoming a very significant industry, and an important order has just been placed with the Passage Docks by the Grand Canal Company of Dublin for the construction of five iron barges for use in the Grand Canal Company's river trade. Under the able management of Mr. Allan Johnson, the Passage Docks are capable of turning out work in the line of shipbuilding and repairing equal to any that can be done elsewhere in the United Kingdom.



A SKETCH IN ALKMAAR : BY F. T. W. GOLDSMITH.

and the Bust is placed on an adjoining pillar. The Sculptor devoted loving labour to the work, which bears the date 1857, and represents the poet in his prime, with a strong, beardless face and sensitive mouth, and the abundant hair which he carried till his death. The Bust was thoroughly approved by those who knew Tennyson 40 years ago.

DRAYTON MANOR, near Tamworth, which it is said, the late Speaker, now Viscount Peel, will make his home, once belonged to Hugh Lupus, Earl of Chester, and in 1390 passed into the hands of the Staffords. It afterwards became the residence of the Countess of Essex, mother of Queen Elizabeth's favourite. It then passed into the hands of the Marquis of Bath, who sold it in 1790 to Mr. Peel. The Queen visited the great Sir Robert here in 1841. The old Manor House was a timbered structure, but the existing one is a handsome modern Mansion, built in the Elizabethan style. The Portrait Gallery is very interesting, con-

NOTICE.

Our Next Number,

June 18th,

*Will mark the Second Great Development of***The Builders' Journal***Which now possesses a***Larger Circulation***Than any other Architectural Journal published in this country.*

This Special Issue will have all its inside pages Printed on White Paper. We have invited three of the best known Pen and Ink Artists to submit us designs for a New Head Piece, the best of which will embellish the issue. This number will be sent by Post to Every Architect, Surveyor, Borough, Diocesan and Ecclesiastical Surveyor, Clerk to the Local Board, in England, Ireland, Scotland and Wales. This, with the Publisher's ordinary Edition, will make the output close upon

25,000 Copies.

MR. THURSTAN C. PETER'S explorations at Carn Brea are successful. Twenty-seven arrow heads in one circle, a large spinning-wheel, a javelin head, silver and bronze coins and rings, besides pottery, iron pyrites, and flints, are among the finds, which have been forwarded to the British Museum for examination. The report will be awaited with much interest by adjoining residents. Old historians of Cornwall have recorded notices of coins previously found at Carn Brea; but the things discovered by Mr. Peter will throw probably much light on disputed points.

THE Wrexham Wesleyan Quarterly Meeting has sanctioned a scheme for building Chapels at Ruabon and Caergwle, for completing the Chancel in the Wrexham Church—built four years ago—and for refurnishing the Sunday School. The total outlay will be £2,000. Sir Watkin Wynne has given a valuable site at Ruabon, allowing part of his park to be appropriated for the purpose. Subscriptions to the amount of £1,500 have already been secured, including £200 from the Rev. J. S. Haworth, a former superintendent.

THE eleventh annual Exhibition of the Home Arts and Industries' Association will be held in the Albert Hall from the 13th to the 17th June inclusive. Pupils from the various classes will work at intervals at wood carving, leather embossing, lace making, spinning and weaving, &c. Mr. G. F. Watts, R.A., has just presented 1,000 guineas to the endowment fund of this Association.

The Builders' Journal.**MEN WHO BUILD.**

No. 16.

MR. GEORGE H. WILLOUGHBY.



LANCASHIRE is not a very happy county when Scotch mists hang over the moors, or when a Lancashire rain is soaking down for days at a time. Manchester itself is a gloomy City at best, and on a wet day its gloom is deadly, even when you take coffee at the Reform Club, and pass an early hour with one or two congenial spirits at the Brasenose. But there is one point about a Lancashire man that pricks him very deeply—punctuality is his topmost virtue, and when your hour for calling on him or visiting him is twelve of the clock, he expects to hear your soothing footsteps on his stairs, and to hear the click of his office lock, as the City clocks are booming the hour of your appointment. If you are late he will apologise for you.

George Harry Willoughby, partner in the firm of Woodhouse & Willoughby, served his articles with Messrs. Pierpoint, Hughes & Pierpoint, of Warrington and Preston, and eventually became assistant to a well-known Manchester firm. Twelve years ago, when in his twenty-fifth year, he commenced practice in Stockport—his native place—and was fortunate to be commissioned immediately to build several big houses for hat manufacturers living in the outskirts of the town. He also began what has since proved to be a remarkably successful career in competitions, and obtained the Conservative Club House at Heaton Norris; the Union Club, Stockport; the Edgeley Wesleyan and several other Schools; together with private commissions for the erection of new offices for Joseph Legh, M.P., additions to Chetwode Hotel, Crewe, to Bromborough Hall and the Court House, Cheshire. In 1884 he sent in, with Mr. J. H. Woodhouse, of Manchester, a competitive design for the Widnes Town Hall, and it was placed "third" by the Assessor. In the following year a joint partnership was arranged between Mr. Willoughby and Mr. Woodhouse, and since that time they have developed a remarkably successful competitive practice in the designing and equipment of Technical Insti-

tutions and School structures of all kinds. It is quite extraordinary the success that has come to Mr. Willoughby's firm from competitive work, five Technical and three large Board Schools having only just been completed, apart from smaller work of the same kind at Stockport, Ardwick, Great Harwood, and other places. The Blackburn Technical and Trades' School, the Foundation-Stone of which was laid by the Prince of Wales, is also just completed at a cost of £30,000, gained in open competition from 76



competitors. In 1890 Mr. Waterhouse placed Messrs. Woodhouse and Willoughby's designs for the Victoria Institute at Worcester, second among the six selected schemes, and in the same year they won the Rochdale Technical School, which has since been built in Ruabon terra cotta, at a cost of £10,000. In 1892 Mr. Tuke, of Manchester, placed their drawings first in the Heywood Technical School, and his decision was unanimously endorsed by the Building Committee. In the same year their scheme was selected for the Free Library and Technical School at Widnes, and the Winsford Gymnasium and Technical Schools. The Holland Street Ancoats School for 1180 children is the work of Messrs. Woodhouse & Willoughby, and is costing £11,600. The Higher Grade School at Salford (£10,500), and the Salford Boards' new offices in Chapel Street (£10,000), are also by these Architects, the latter work having been secured in a limited competition confined to a number of Manchester and Salford Architectural firms chosen by the Board to compete. A sketch of this building, drawn by Mr. Langham, was published in a recent number of THE BUILDERS' JOURNAL. Many other works of a scholastic nature have been done, and not until a couple of years ago, when they submitted a scheme for the St. Helen's Free Library and Technical Schools, which was placed first by the professional Assessor called in to adjudicate upon the drawings, have Messrs. Woodhouse & Willoughby ever met with unfair treatment. In this instance, although the advertised premiums were awarded according to the experts ruling—the Committee decided to carry out the second design, no reason or explanation being offered for a most inequitable proceeding, not even to the Council of the Institute who addressed one of its thundering communications to the



HOUSE AT STOCKPORT FOR MR. THOMAS LEES, J.P.: G. H. WILLOUGHBY, ARCHITECT.

St. Helen's people without disturbing their equanimity in the slightest.

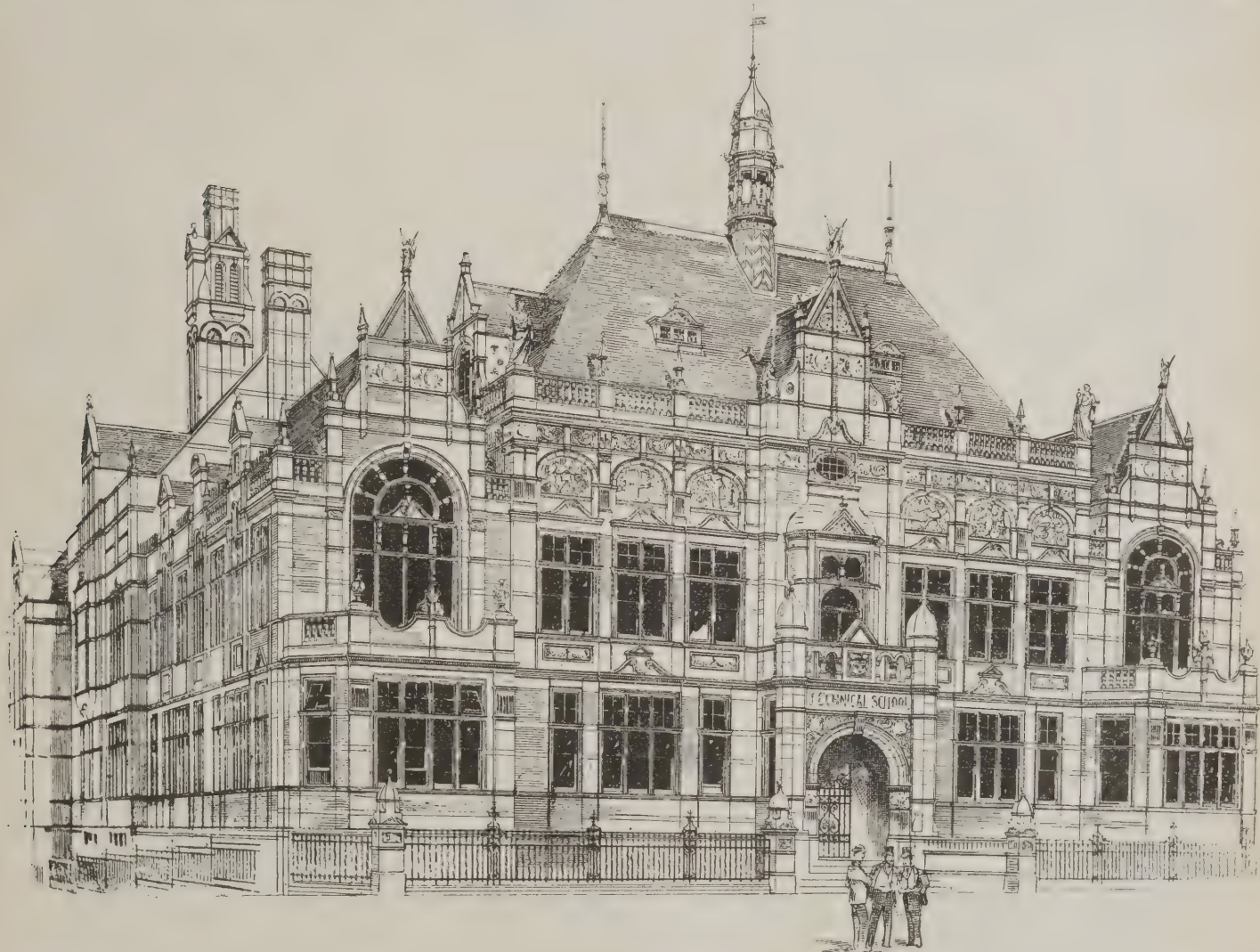
It rains; a steady downpour clatters on the pavements and makes music in the gutters, and the air is a little fresher than it was. But it takes something more than the determination of the weather to upset the arrangements of Manchester, and so Mr. Willoughby, sensibly garbed in thick-soled boots and calmly ignoring your own thin consumptive foot gear, goes out into the storm to visit his jobs at Salford and Ancoats. The horses in the north are much better brutes than one sees down south, and your cab rattles along the street in a fashion that would make a London policeman green with fury. Mr. Willoughby, knowing the interest you take in Terra Cotta, lures you up all sorts of death traps, so that you may see the work in actual construction; vertical

planning of Schools now-a-days is "much of a muchness," but the Manchester men have a little to learn, from Messrs. Robson and Bailey's work, of good proportion in their elevations and in their massing of parts. In the block of Schools last mentioned—the Architect of which you need not inquire—there is a terrible blunder in the arrangement of the staircase and in its lighting, and much of its exterior detail is crude and unworthy of the planning. The cost of this particular work comes out at 4½d. per foot. A little more care and another halfpenny would have made an excellent building of it.

The day is far spent when you return in a very limey and dilapidated condition to the charming offices of Messrs. Woodhouse and Willoughby and join once again in the spirit of competitions, on one of which all hands are engaged. Mr. Willoughby has

of a good cigar. Good cigars are somewhat like good Architecture, they are sometimes difficult to obtain. The inferior article is often palmed off upon us, and we accept it, but George H. Willoughby can give you a good weed, and shew you good Architecture, free from the eccentricity of the too Modern School, free from the almighty effort to do something noble and doing it badly, free from the imperfect planning of many of his contemporaries, and full of honest, good work, which bears inspection and much admiration. Both he and his partner deserve the success which has come to them.

The Tower of the new Lighthouse which is being erected at Penmarch Point, on the coast of Brittany, will be 185 feet above high water line, and is being built entirely of



THE BLACKBURN TECHNICAL AND TRADE SCHOOLS: WOODHOUSE AND WILLOUGHBY, ARCHITECTS.

ladders are assailed with the cleverness of an able-bodied seaman. Cinquevalli has done nothing bolder than your desperate plank feat over a yawning abyss of 20 yards to test the very charming colour of Messrs. Doulton's material. The Salford School Board will have a very cleverly planned block of offices, and as fine a specimen of Terra Cotta work as you have yet seen. Back goes Jehu through the slippery streets to Ancoats, and its slums, and on the plain of desolation stands the Holland Street School which, on closer examination, proves a wonderful building for £11,600. The Manchester School Board has a system of placing their buildings under the supreme supervision of one Clerk of Works—a careful and clever man—and he is invited by Mr. Willoughby to show you another School, by another Architect, some short distance away. The

studied a little of human nature, and studied it wisely. He has discovered—how much against his wish you need not ask—that there is a deal of commercialism in the noble profession of which he is so competent a member, and like the smart man that he is, has not kicked against the pricks, but calmly done his best to inspire the commercial spirit with higher motives. His own room, therefore, is delightfully appointed. The grandfather's clock—all Manchester men have grandfather's clocks—and the portraits of his children over the mantel give a soft touch of homeliness to the severer aspects of the surroundings, but no cobwebs of hallowed memory decorate the walls. The inevitable chat which follows a pleasant day is welcomed, and it fills out the remaining office hours, and overflows into King Street and across to the Reform Club, where it is finally lost amid the smoke

granite from Kersanton Quarries, near Daoulas Finistere. The electric light with which it is to be furnished will be of such intensity as to be visible at a distance of nearly one hundred in clear, and from twenty-five to twenty-eight miles in hazy weather. The actual illuminating power of the light will be 10,000 candles, which is much greater than that of La Hève (Seine Inferieure), admittedly the most powerful light at present on the French coasts.

MR. H. J. WEAVER has been appointed Assistant Surveyor and Building Inspector to the Gloucester City Council. The remuneration is £150 a year.

THE Halifax Town Council has applied to the Local Government Board for permission to borrow £15,000, for the erection of a new Court House and Police Station.

CHARACTERISTICS OF CELTIC ART.

THE RECENT REPRODUCTION OF THE NIGG CROSS SLAB.

THE reproduction of the Nigg Cross Slab recently added to the Edinburgh Museum of Science and Art, is highly interesting to Archaeologists, seeing that the Nigg Cross Slab is the most perfect, both in design and preservation, of the Ross-shire Monuments, and is a thoroughly typical Celtic stone. The Slab now measures 7 feet 4 inches high by 3 feet 5 inches broad, and is rather more than 5 inches thick. The sides are nearly parallel for a height of 6 feet; they then slope inwards to form a gable-shaped top, in which the principal figure subject is sculptured. When entire the Monument must have measured about 14 inches higher than at present; but it was thrown down during a gale in 1787, and broken in two pieces. When seen by Mr. C. C. Petley, who visited Nigg in 1811, the one portion was lying in the churchyard, and the other had been thrown over the churchyard wall. Fortunately, Mr. Petley made drawings of the two fragments, and from these drawings it is possible to restore the parts which have been broken off and destroyed since his visit. This priceless Monument, which thus so narrowly escaped destruction, has now fallen upon happier times. The general plan of the decoration of the Slab is similar to that seen on many of the decorated pages of Celtic manuscripts. The surface of the obverse is divided by panels which are so arranged as to form in the centre a cross, the shaft of which extends to the bottom of the Slab, the other panels serving as its background. The ornament is entirely different from the Romanesque forms of the Ruthwell Cross. Celtic Art is, so to speak, a child of the soil. Its elemental forms are so simple that they have been the playthings of every nation in its young days. The early Greek potter had little else than these frets and spirals and twisted bands with which to decorate his vessels. By-and-bye he mastered the human form, and these primitive elements had to take a subsidiary place. But to the Celtic Artist they are his all in all. It is true he carves many figure subjects, but these crude productions can never be looked upon as Celtic Art. It is by its ornamental forms that it must be judged, and though these are limited for the most part to the fret, the spiral, and interlacements of varying complexity, an examination of the panels of the Nigg Stone will show to what unequalled skill and what beautiful results the Celtic Artist attained. His interlacings twine and intertwine with a certainty and unerring accuracy that almost defies imitation; his spirals are bewildering in their complexity, yet as an ornamental pattern are clear and perfect, and even on the fret or key pattern, common to every people from Ross-shire to Peru, he stamps his individuality, and by an original treatment marks it as a Celtic form. As a rule, the human figure and animals appear on these monuments only to serve the purpose of filling up spaces, without regard to proportion or artistic composition. On the reverse of the Nigg Stone there is a gathering of various sculptured forms which seem to have little connection with each other. The central group, David rending the jaws of the lion, is much damaged, and would be unrecognisable save for the symbols—the harp and the sheep, which remain to tell us that the sweet singer of Israel is here represented. Below and above this group is a stag hunt in much better preservation, and showing a good deal of natural drawing and action. This subject is said to have a symbolical significance, and refers to the chase of the soul until it finds rest in the bosom of the Church. Other forms there are on these monuments which are purely symbolic, but which have defied all attempts to ascertain their meaning, and among such are the so-called elephant symbol on the Nigg Slab and on the Shandwick Stone, and the spectacle form and the crescent and V-shaped rods on the Hilton Monument. The principle figure sculpture on the Nigg Slab is scarcely less free from mystery. In the pediment shaped top of the obverse, two figures in flowing robes, and with hair falling on their shoulders, are represented in high relief, facing each

other, and bending forward toward a chalice-like form placed in the centre. Each holds a book in his hand, and seems intent on its open page. Two dogs cower below the figures, crouching low as if awed by some supernatural power; while in the centre a dove descends, bringing in her bill the sacred wafer to complete the elements of the Eucharist. Over the group are two very conventional trees which form an enclosing border. The Nigg Slab is not only an unrivalled example of Celtic ornamentation, but to the student it is quite an epitome of the characteristic forms of Celtic Art.

SCULPTURE DECORATION OF ST. GEORGE'S HALL, LIVERPOOL.

MR. STIRLING LEE'S PANELS.

AN interesting report on the completion of St. George's Hall, Liverpool, was considered by the City Council last Wednesday. The report gave a *resumé* of the inception of St. George's Hall, and the gradual completion of the building to the present day. After referring to the designs of Mr. Elmes, the report stated that Mr. Elmes' early death unhappily prevented his superintending the completion of the building, but Mr. Cockerell proved himself capable of carrying out Mr. Elmes' scheme, so far as the shell of the building was concerned, and successfully commenced the sculpture required for its completion by the group on the pediment, in which it would appear he was assisted by Mr. Alfred Stevens, but to what extent is not known. The partially completed building was opened in 1854, which was not a very brilliant period of English Sculpture. The Council seemed to have feared putting so important a work into incompetent hands, and nothing more was done for some years. In 1882 (the prospects of English Sculpture having very much improved) Sir James Picton proposed that the Council should endeavour to worthily complete what would be the chief glory of Liverpool, if not spoiled by incompetent hands, and a commencement was made by commissioning Mr. Stirling Lee, after a severe competition, to carve certain panels on the east side of the Hall. Doubts were roused in the minds of some members of the Council as to the success of the first two panels, which delayed the work for some years, but at length, in 1894, Mr. Stirling Lee was enabled to complete the first six panels, and their singular success in carrying out Mr. Elmes' conception was universally admitted. For several cogent reasons the work should now be vigorously, but cautiously, pressed forward to completion. The building would then be a monument perfectly unique in its successful adaptation of Classic Architecture to modern uses, and give an idea of the glories of Greek work in its most perfect development. Owing to the difficulty of adapting the Classical forms to modern requirements, it would probably remain unique in its character, and be quoted as the only really successful attempt in the World to revive the full glories of one of the finest periods of Architecture. Fortunately the opportunity now offered itself. During the last few years a young School of Sculpture had arisen in England, which promised to be the finest England had seen. Whether it was to be permanent or not depends upon the encouragement it received, especially the encouragement of Monumental Sculpture, combined with Architecture. Though, unfortunately, many of Mr. Elmes' plans and drawings had disappeared, he had on the building itself indicated the position and nature of the sculptures necessary for its completion, the panels, for relief Sculpture, the bases and pediments for the statues, &c. These Mr. Lee had worked out with great care and sympathy. During the progress of the work, Alderman Rathbone, who had prepared the reports, felt they would gather to Liverpool skilled workmen of the highest class, and set an example which would no doubt have no unimportant effect in inducing great companies to erect noble buildings, causing Liverpool to take a leading position in the great rebuilding of the cities of England which will be a prominent feature of the first half of the twentieth century. The first step would seem to be the completion of the south end of the east wall, by

placing the requisite figures over the panels already completed, representing the growth of Justice. St. George's Hall had, according to the statement in the annual accounts of the City Treasurer, already cost £317,000, and it could not therefore be thought that the carrying out of the new work, which it is estimated will cost £40,000, was by any means extravagant, seeing that ten years will be occupied in its completion, and the sum of £4,000 per annum only be required for that period.

PROGRESS OF ELECTRIC TRACTION.

A REPORT on Electric Traction has been drawn up by Mr. R. Hammond for the Dublin United Tramways Company, which proposes to obtain powers to work its cars by electricity. He thinks that horse traction will soon be regarded as "barbarous, clumsy, inefficient, and wasteful, and for tramway work quite inadmissible." Major Marindin in a recent communication to the Board of Trade has reported adversely to steam as a motive power even on the few tramways where it is still employed, and cable trams can only be used with advantage on steep gradients. Mr. Hammond, therefore, concludes that the electric tram must supersede all others for general purposes in the near future. It has already been tried on a large scale in the United States and Canada, where within ten years from the opening of the first electric tramway 9,000 miles of line have been laid down on this system, as well as in many Continental cities and in a few places in the United Kingdom, as, for instance, in South Staffordshire, at Blackpool, and in the Isle of Man, and the results attained have been, on the whole, satisfactory. Mr. Hammond points out that an electric tramway may be worked either from accumulators carried on the cars or from a central generating station, the current being conveyed to the cars by wires. Accumulators have as yet been little used—first, because they are wasteful, and secondly, because they increase the weight of the cars, and therefore necessitate frequent repair of the track. All but about half a dozen lines are worked from a central station. The current may be conveyed either along cables fixed in open conduits or through wires suspended from standards. The first plan has only been tried at two places in Europe—Blackpool and Buda-Pesth. It is found to be often unsatisfactory, because, as at Blackpool, the conduits become choked with dirt and stones so as to interrupt the service, though on the other hand the Buda tramway, which is laid on sloping ground so that the channels are naturally drained, is probably one of the best in the World. Mr. Hammond, therefore, pins his faith to the second plan, by which the current is supplied through overhead wires, along which travels a wire connected with the motor on the car. These overhead wires have, he thinks, been unjustly attacked as being dangerous, troublesome and unsightly. He brings forward the evidence of Mr. Edison and Professor Elihu Thompson, to show that a current of 500 volts, the maximum pressure allowed on the Liverpool Overhead Railway by the Board of Trade, is perfectly safe. He quotes a letter from the captain of the Wednesday Fire Brigade to prove that the wires, if hung along the sides of the roads at a height of 21 feet, would not seriously impede the passage of a fire-escape to or from by-streets, and shows by photographs that heavily-laden waggons could easily pass between a car and the wires with which it is in connection. When, however, Mr. Hammond tries to show that "the overhead system can be carried out in such a manner as not to offend the æsthetic tastes of the citizens of Dublin," he is less convincing. His photographs show that the tramway at Milan, where each of the standards placed in the centre of the double track supports two wires, is less unsightly than the South Staffordshire lines, with plain iron poles erected along the sides of the roads. But even admitting that the design of the standards might be improved, it is impossible to contemplate with satisfaction the prospect of having still more poles and wires to join with lamp-posts and telegraph poles in making our streets hideous.

THE ADVANTAGES OF SEMI-CIRCULAR PORTICOES.

ONE thing that ought to recommend Semi-circular Porticoes is the greater variety of optical and perspective effect attending them, inasmuch as the apparent position of the columns is constantly shifting, accordingly as the spectator changes his situation. Nevertheless, such plan is but very rarely adopted, for the two Porticoes to the Transepts of St. Paul's are almost the only ones of the kind of particular note. Though but subordinate features in themselves as compared with the entire pile, these Porticoes are greatly superior in taste, in both Classical and grandiose quality, to almost everything else produced or designed by Wren, some of whose works it may be fairly suspected, would obtain very little admiration at present, or even the semblance of it, were it not for the authority of his name. The nobleness which stamps that example of a Semi-circular Portico would perhaps be most striking were a similar Portico, and upon the same scale, made

compatible with originality, or that it is only by deviating from the former that the latter can be attained. Few knew better than Soane how not only to overcome difficulties of site and plan, but to turn them to positive account—therein lay his peculiar forte; and no doubt the idea of that feature of the Bank of which we are speaking was forced upon him in the first instance as an expedient for getting rid of a harsh angle and connecting the north and west sides of the building by an intermediate feature of sufficient importance to claim to be considered a distinct composition. The curvature of this Loggia is much less than a semi-circle, which would perhaps be a defect did it project from a plain surface, because in such case a segmental curve would have a look of feebleness and indecision, but as the Loggia is placed at an angle of the building it defines itself sufficiently; besides which the pair of columns placed on each side of it serve both to frame in and to extend the composition. There is, moreover, another circumstance which greatly enhances its effect, namely—the introduction of two columns placed on a chord-line of the exterior

A MARINE LAKE FOR RHYL.

THE inauguration of the new Marine Lake and the completion of the new Sewerage Works at Rhyl took place last week, and, it is stated, that during the past five years the public authorities have spent £200,000 in improving and enhancing the value of the town. The first improvement of note was the asphalt-ing of the Promenade, followed by the erection of an Infectious Hospital. With the object of procuring an effective water supply, the Corporation purchased Waterworks at a cost of £75,000, and afterwards decided to acquire the Gasworks, for which £35,000 was given, and £20,000 was spent in placing the Waterworks in an effective condition and enlarging their capacity. Last, but not least, came the re-arrangement of the sanitary conditions of the town, and the formation of the Marine Lake. The former scheme, which has cost over £30,000, was placed in the hands of Mr. Baldwin Latham, C.E., who has succeeded so well that it was declared by medical authorities that Rhyl is the only watering place,



the main feature of a different composition; still no one has cared to adopt avowedly what Wren has there done—which certainly is not owing to aversion to copying or to dread of the charge of plagiarism. The same remark applies to another and quite different example—so different, indeed, from everything else of the kind as to be almost *sui generis*, and to all appearance likely to remain such, none having as yet even borrowed an idea from the truly charming Loggia at the north-west corner of the Bank of England, which is confessedly and incontestably Sir John Soane's masterpiece, stamped as it is by genial artistic feeling, and fraught with an extraordinary degree of picturesque effect, so that it almost becomes captious hypercriticism to object to it that it is after all only a piece of Architectural decoration. Avowedly derived from the Temple of Tivoli, that composition of Soane's may, nevertheless, lay claim to more decided originality of application than designs in general, for, if not indebted to ideas for any particular example, they are apt to be fashioned according to routine, and it need not be said that routine is in-

compatible with originality, or that it is only by deviating from the former that the latter can be attained. Few knew better than Soane how not only to overcome difficulties of site and plan, but to turn them to positive account—therein lay his peculiar forte; and no doubt the idea of that feature of the Bank of which we are speaking was forced upon him in the first instance as an expedient for getting rid of a harsh angle and connecting the north and west sides of the building by an intermediate feature of sufficient importance to claim to be considered a distinct composition. The curvature of this Loggia is much less than a semi-circle, which would perhaps be a defect did it project from a plain surface, because in such case a segmental curve would have a look of feebleness and indecision, but as the Loggia is placed at an angle of the building it defines itself sufficiently; besides which the pair of columns placed on each side of it serve both to frame in and to extend the composition. There is, moreover, another circumstance which greatly enhances its effect, namely—the introduction of two columns placed on a chord-line of the exterior

THERE are no fewer than 103 Cathedrals in the United Kingdom. Of these 48 are Roman Catholic Cathedrals, 36 Church of England, 12 belong to the Church of Ireland, and 7 to the Episcopal Church of Scotland.

with one exception, which possesses such a perfect scheme of sanitation. These works have been in progress eighteen months. The new Marine Lake has been constructed at a cost of £10,000. It covers forty acres, and has a uniform depth of four feet, on which boating can be indulged. Captain Keating, Chairman of the Council, performed the opening ceremony, and at a banquet given in the evening, Sir Arthur Cameron, M.D., said he was delighted to find that Rhyl, with its population of 8,000, had actually gone to the expense of £4 per head of the whole population in perfecting its sanitary system. The fact that the sewage was discharged into the sea one hour after high water on the ebb tide, and when there was at least twelve to twenty feet of water above the outlet, proved that there was no possibility of contamination. Their Sewage Works were now as perfect as it was possible to make them. Speaking of the Lake, Sir Charles said he was surprised to find such a magnificent sheet of water. The great advantage was that navigation would be unattended with danger.

THE APPROACH TO WESTMINSTER. COMPLETING "THE FINEST SITE IN EUROPE."

THE Government's decision to remove the King Street block, to improve the approach to Parliament and Westminster Abbey, makes it useful to know something about the plans concerning it. The narrow street was a hindrance to traffic in the time of Charles II. The difficult street was tolerated, amidst many grumbings, until it became necessary to build a new Bridge at Westminster more than fifty years later. For the years 1754 and 1755 the sums of £2,000 were voted by Parliament (ten millions was then the cost of governing England) for the new Westminster Bridge, and in the following year an Act was passed for making the present Parliament Street. The improvement of King Street then dropped out of view. For a hundred years the subject slept, to be revived when other improvements were projected, viz., another new Bridge at Westminster, and better Government offices. A Parliamentary Committee was appointed in 1856 to consider the subject. When prizes had been awarded for the new Government offices designs, a controversy arose as to the style. A Gothic had been selected, but Lord Palmerston objected, obtained his way, and Classic was adopted. The new offices from Downing Street to Charles Street were built, and they brought about the beginning of the demolition of King Street. A long block of King Street stretched from the point where Charles Street cut it in two to the end of Downing Street. It was removed, and opened out the facade of the new offices, making a thoroughfare over a hundred feet in width. But the more ambitious plans for buying the block between King Street and the Park, Charles Street, and Great George Street, in order to put upon the site the new War Office and Admiralty were to undergo a very peculiar fate. They were nebulous at first; a Committee in 1874 gave them shape; it was then fixed that the Great George Street site should be adopted; and then the whole site was abandoned. Captain Galton, who was then at the Office of Works, prepared plans. In giving evidence to the Select Committee on Public Offices and Buildings, June 26th, 1877, he said:—"I always thought that it would be necessary to complete the approaches to the Houses of Parliament by the purchase of the block between King Street and Parliament Street, and that if the Government made that purchase, it was desirable to extend its purchase to some distance on the other side to the west of King Street, and to erect a handsome building of a palatial character in continuation of the present Home and Colonial Offices." The Committee of 1868 made another pregnant suggestion—the removal of St. Margaret's Church. They said:—"When a magnificent street 150ft. wide has been opened from Whitehall to Westminster Abbey and the new Palace, it will be more than ever necessary to remove what will then be the only obstacle to the Abbey forming the termination of a site which will probably be unsurpassed in any European capital." As long as the idea remained of building new offices along the line of the home Office, preparation was made for the work. Houses and properties in Parliament Street and King Street were bought by the Government. At the present moment the Government owns threefourths of the land and buildings required for the entire removal of the King Street block that remains. If there had been no change from the Great George Street site for War Office and Admiralty buildings to the Spring Gardens site, as much of the King Street block as lies east of a line drawn from the corner of the Home Offices to Parliament Square would have been scheduled for removal at the present time. In 1882, on the adoption of the Spring Gardens site, Mr. Shaw Lefevre, then Commissioner of Works, suggested to the Metropolitan Board of Works that the widening of Parliament Street should be done by them, the Government co-operating by taking out the value of its property by arbitration in new frontages. The Board was prepared to widen Parliament Street to the Home Office line, at an estimated cost of £200,000, "provided

the Government would consent to continue the coal dues." This the Government was unable to do, and so the scheme dropped. It was again revived in connection with the Parks Railway Bill of 1883-4. This railway was to afford direct access to Westminster by underground from Edgware Road and Praed Street Stations of the Metropolitan Railway, under Hyde Park, the Green Park, and St. James's Park to a station behind Parliament Street. After discussion the Metropolitan Railway Company agreed to "widen Parliament Street to a line with the Foreign Office, and to construct a new street, 50 ft. wide and 340 ft. long, in place of King Street," opening out from 35,000 to 40,000 square feet of land as public roads. A Committee sat upon the scheme and condemned it, amongst other reasons because it would be "necessarily burdened with conditions which the promoters had not contemplated," viz., the widening of Parliament Street. The last effort to get rid of the King Street block is interesting for many reasons. Section 4 of the Westminster (Parliament Street, &c.) Improvement Act, 1887, provided for the formation of a company to execute certain street alterations within two years, but no company could be formed, and so in 1892 another Act was passed modifying that Act and reviving the powers of a company. This company approached the London County Council, offering a site for a new County Hall, "on the west side of Parliament Street, between Great George Street and Charles Street." The Report of the County Council upon Sites, dated July 4th, 1893, sets forth that this site is recommended by them, and that the Westminster Company, by the Acts just mentioned, is compelled "to widen Parliament Street to the width of Whitehall, and the works must be accomplished by August, 1896." The County Council deferred the question of a County Hall, and the Westminster Company, after drafting a Bill to continue its powers last year, allowed it to be withdrawn. The exact nature of the position before the decision of the Government was stated by Mr. Shaw-Lefevre in his evidence before the Parks Railway Bill Committee, April 30th, 1884. There were other "more pressing improvements," it was "out of the question in these days for the Government to undertake that which is a Metropolitan improvement," and the block of traffic was not so great as to make widening "an absolute necessity." He added, "At the same time, from other points of view, as an approach to Westminster and Parliament and the Abbey, it is an extremely important one as a general improvement." It has at last been decided that the Government shall make the improvement, and we hope that London Architecture may thereby have its "grand chance." The opportunity must not be lost.

SCULPTURE: A COMPARISON.

THE ACADEMY.

THE average of merit in the Sculpture shown this year at the Academy is high, though the number of works exhibited is fewer than that of last year, and the Sculpture Gallery is so little crowded that wall space has been found for a couple of large pictures. A welcome symptom in this year's Exhibition is the representation in the Lecture Room of some of the Arts allied with Sculpture in the shape of some metal caskets, variously adorned, and other objects, or designs for them, in enamel and damascened steel, as well as a bust carved in wood and a head in ivory. The Academy is waking up to the fact that it is an Academy of the Arts—not of two or three privileged ones. "The Joy of Life," by Mr. Hamo Thornycroft—the life-sized figure of a girl dancing—is a daring feat; the thought is symbolic, the embodiment modern, the treatment almost classical. It is easy to see that in the execution of this figure the sculptor has avoided no difficulty, and in bringing his work to a successful issue he has won no cheap victory; the admirably poised figure is full of exuberant youth—of vigorous movement and of the self-display that comes of enthusiastic youthful self-delight. In "The Late Right Rev. Harvey Goodwin, Bishop of Carlisle—recumbent statue, bronze; to be placed in Carlisle Cathedral" Mr. Thornycroft is successful with a widely

different subject. It is treated in a fine, stately, and effective style, this recumbent figure of a Bishop with his mitre at his feet and his pillow supported by two charming little angels. The modelling is strong and grave, and the contrasted richness and simplicity of line in its general arrangement is Sculpturesque. "Echo," by Mr. E. Onslow Ford, is a very favourable example of this sculptor's handling; it has none of the unhappily imagined accessories that have sometimes, in former years, tended to obscure the merits of plastic work that is always earnest and artistic. The attitude of the slender-limbed naked figure of Echo is graceful and harmonious; there is little idealization in it. It is, from one point of view, simply and merely an admirable bronze study of a nude girl; but it is wrought with such a tender and delicate feeling for what is beautiful in un-idealized form that it thereby attains to a certain quality of ideality and remains a wholly admirable figure. In "For she sitteth on a seat in the high places of the city," Mr. Bertram Mackennal has made a stride in advance of his "Circe" of last year. In the expression of beauty as well as in richness of design he has equally developed. He represents the Foolish Woman of the Proverbs as an amply formed nude seated on a throne that is elaborately allegorical in its decoration and terminates at the back in the figure of a fiend. The whole composition is strong, thoughtful, and impressive.

THE CHAMPS DE MARS SALON.

EVERYONE is attracted by the wonderful Tomb by Bartholomé, which faces the entrance. A fine piece of harmonious originality such as this makes one wonder why the World tolerates the tedious sentimentality of the ordinary cemetery. The Tomb is a plain opening in a flat wall. The young man and his young wife, beautifully modelled, are entering, one at each side, as spirits strong and pure. Under the threshold are their earthly effigies, laid together in death; while above them rises, with a splendid hope, the Light that shineth in the darkness. Upon either side the composition is carried along by groups which indicate their relatives and friends—the old and young. Nothing could be simpler and nothing better. There is another notable Monument, designed by St. Marceaux, for the Tomb of M. Tirard. It is a figure of "Duty," similarly set simply against a flat wall and perfectly unpretentious; but its splendid strength of line and the tense energy of the pose are its distinction. In the Galleries can be seen one of those heads by Rodin, half embedded in its native stone, the subtle surfaces of which recall the best times of Florence; and there are also two excellent things by Dampé—one a wonderful baby head (recalling his "Baiser de l'Aieule," which has found its way to the Luxembourg), and another a daring but excellent statuette in wood and ivory. Nor should one pass over lightly the wonderful collection of objects of Decorative Art—things of household use, such as inkstands and teapots and brackets and pottery and binding—which are displayed in the Gallery of the Central Court. Nothing in modern French work is more laudable than the way in which their very best men lend their full energies to designing such things as these, which indeed can be bought for hardly more than our rich people pay for the gaudy and tasteless shop-goods which represent to the enriched iron-monger the acme of domestic splendour.

It is expected that Lord Brassey, the President, will take the chair at the summer meeting of the Institution of Naval Architects, which will be held this week in the Amphitheatre of the Sorbonne, Rue des Ecoles, Paris.

Out of thirty-eight applicants for the Assistant-mastership in the Linlithgow Academy, the Governors have appointed Mr. William B. Watson, M.A., of the Edinburgh University.

A CORRESPONDENT says that the latest find in the course of the excavations at Delphi is a large slab of marble, with bas-reliefs dating from the time of the Roman domination. The subject is the labours of Hercules, and the work is in an excellent state of preservation. Excavations are now being carried on upon the site of a Theatre which appears to have been destroyed by the hand of man.

THIRTY THOUSAND TONS OF SULPHURIC ACID PER YEAR.

THE PREVENTION OF BLACK SMOKE.

LIKE some other experts, Mr. Fletcher, the Chief Inspector of Alkali Works, considers that the ordinary coal smoke discharged by factory and house chimneys is far more deleterious to animal and vegetable life than the noxious gases which escape from chemical works. As an instance, he specifies the case of Widnes, where mill furnaces, and not the chemical manufactories, produce and distribute over the surrounding country no less than 30,000 tons of sulphuric acid every year. He is very positive as to the feasibility of entirely obviating this nuisance by the general use of good automatic stokers, a plan for which he claims the merit of greater economy in addition. This is the line which, he understands, will be taken by the long-delayed, but shortly forthcoming, report of the Committee appointed by an association of Manchester manufacturers to practically investigate the subject. It will "show abundantly that means now exist for preventing the discharge of black smoke without any sacrifice of economy." Meanwhile the Chief Inspector propounds a method by which that other offender—the domestic open fire, so dearly beloved by English people—may be deprived of its present powers of mischief. This is not the adoption of the stuffy Continental stove, nor any ingenious contrivance of draughts, but a plan whereby the fresh air is heated in a basement stove before being allowed to circulate through a dwelling. "If a copious stream of filtered fresh warm air be supplied from below into the centre of the house, it follows the passages, passes into all the rooms, and ultimately escapes by the chimneys and window crevices, thus quite preventing the draughts of cold air previously sucked into the house, and the most objectionable down-draughts of disused chimneys." Mr. Fletcher writes after long experience of the system. It might easily have been an improvement on open fire-places during last winter. "I lately heard of one house, inhabited by a large family, where recently, during a week of frosty weather, 21 open fires and five oil or gas stoves were kept burning. In this case, of course, each fire, though emitting a certain quantity of radiant heat, went far to neutralising this by the indraught of cold air necessarily drawn into the house to supply the currents sent up the open chimneys. There is no doubt that one of these 21 fires burnt in a properly arranged stove would have heated the whole house more effectually than did the whole 21. In a house, the general atmosphere of which is maintained at a temperature of 55 degrees or 60 degrees Fahrenheit by such a stove, the fires may be lighted, but they will receive little attention, and, except in the coldest weather, will not be used at all. In this manner I think the consumption of coal would be greatly diminished, and the smoke and smuts of our town air in large measure removed. Certainly the comfort of a house so warmed is much greater than one warmed only by open fires, and the coal bill is much less. In a London house, of which I speak from experience, the cost of coke or anthracite coal burnt in the stove which warmed the whole was only £3 during the winter, while in neighbouring houses of the same size the coal bill was not less than £25." This very important piece of practical information may perhaps suggest a means whereby sufferers from Corporation gas bills may indemnify themselves, to their own and the general advantage.

SAWDUST.

In our last issue we stated that Messrs. W. H. and J. D. Lever were building a Church, Schools, and Manse at Bolton, at a cost of £15,000. We are asked to state that Messrs. Lever Brothers are not erecting Schools, only a Church and Manse, the cost of which will be upwards of £22,000.

The Earl of Strafford will unveil the Williams Memorial Clock Tower in the Broadway, Crouch End, on Saturday, June 22nd. The Tower has been erected by subscription at a cost of £1,200, to commemorate Mr. Williams' 21 years' service to Hornsey.

THE Government has notified its acceptance of the site offered by the Sunderland Corporation for the erection of a General Post Office, and has agreed, it is said, to spend not less than £20,000 upon the new building.

IN connection with the new Infirmary at Burnley, the Local Government Board has sanctioned the borrowing by the Board of Guardians of £10,000.

RUSSIAN engineers are studying a route for a waterway to connect the White Sea with the Baltic. The total distance to be covered is about 180 miles. Part of the route is already navigable. It is estimated that a uniform depth of 30 feet can be obtained along the entire route at a cost of £1,200,000.

PLANS are required by the Newport (Mon.) Board of Guardians for the extension of the Workhouse. The cost will be between £7,000 and £8,000.

THE Swinton and Pendlebury Urban District Council proposes, with the consent of the ratepayers, taking over the Institute at Pendlebury as a public building. The Institution would provide accommodation for the Overseers, School Attendance Committee, Technical Classes, and a Public Meeting Room. The building is substantial, and has cost £4,500.

THE School Board has resolved to raise from the City Council £17,307 for the cost of the site and School buildings in Dennis Road, Birmingham.

THE Council of the Society of Engineers announce that it has succeeded in making arrangements with the Council of the Royal United Institution for holding the future Ordinary Meetings of the Society in the Lecture Theatre of the Institution, Whitehall.

THE old Infirmary at Dewsbury is to be altered by the Board of Guardians at a cost of £2,800.

At an estimated cost of £18,000, the Police Commissioners of Glasgow have decided to erect new Police Buildings in Allison Street, Strathbungo.

THE deep hole which M. Paschal Grousset proposes to dig as an unprecedented achievement for the Paris Exhibition of 1900, will not be a novelty after all as far as depth is concerned. M. Grousset talks of 1,500 metres. There is a mine in Belgium 1,100 metres, and two in Germany much deeper. One is at Sperenberg, 1,390 metres, and the other is at Schledobach, 1,910 metres. The Wheeling Mine in Virginia is 1,500 metres. Then, as regards distance from the surface of the earth, every time a passenger goes through the Mont Cenis Tunnel he is at one point 1,654 metres beneath the summit, and in the St. Gothard Tunnel he is still deeper, 1,706 metres.

ST. LEVAN Wesleyan Chapel is to be enlarged and redecorated at a cost of £208. Mr. Hodge, of Bosistow, has given land at the back of the existing building which with the land now in the hands of the Trustees, will enable the Chapel to be lengthened 12 feet.

IN the Memorial Porch which Lady Sherbrooke has erected at St. Margaret's, Westminster, there has now been placed a bust of the late Viscount, sculptured in Italian marble. On the pedestal is a Latin inscription from the pen of the late Earl of Selborne.

THE handsome Parish Church of Bunbury, Cheshire, which is said to date from the thirteenth century, was re-opened on Wednesday last, after undergoing complete renovation at a cost of between £2,000 and £3,000.

AN attempt to reach the North Pole in a balloon, for some time projected but hitherto a project very much in the clouds, will actually be made either this year or next. Mr. Andree, the Swedish aeronaut who conceived it, has obtained by public subscription the sum requisite for his equipment, estimated at 30,000 crowns.

THE new road and Esplanade at Hannaford West, Looe, is rapidly approaching completion, and is expected, together with the new western approach to the Bridge, to be ready for opening on July 3rd. The event is anticipated with much interest, marking, as it does, an era for the old towns of East and West Looe. The Marine Drive will be one of the finest on the coast, and the eligible building sites thrown open by it will commend themselves to those who appreciate the charms of the south coast of Cornwall.

ON Tuesday, the Bishop of Colchester, dedicated the Tower of the new Church of Mary Magdalene, Harlow. The Nave and Chancel were built previously, on the site of a temporarily-built Chapel-of-Ease to the Parish Church, and the building has just been completed by the addition of the Tower. The building is in the Perpendicular style, and the Tower is built of flint and brick, with bath-stone dressing, and has a shingled Spire. The cost of the whole edifice was about £2,500. The Church, as now completed, is capable of seating about 170 persons.

ANOTHER marked improvement at Westminster is the clearance of the buildings in Old Palace Yard, whose dangerous proximity to Westminster Abbey has long been a matter of public concern. With the exception of two of the buildings, the Crown leases fall in this year and are at the disposal of the Board of Works. The First Commissioner has succeeded in settling with the owner in the exceptional cases. The work of demolition will commence in the autumn.

THE Free Library Committee of the Leeds City Council is about to complete the purchase of Mr. J. W. Waterhouse's, R.A., picture, "The Lady of Shallot," for addition to the permanent collection of the City Art Gallery. The picture, which is now on view in the Gallery, was exhibited in last year's Royal Academy, and was catalogued at 700 guineas, but as Mr. Waterhouse's father was a Leeds man, and he himself was educated there, and also that he has expressed a wish that Leeds should possess a representative work by him, he is prepared to accept a considerable reduction.

PROFESSIONAL PARAGRAPHS.

At a meeting of the Liverpool City Council it was proposed and decided that a series of Panels be completed on the east side of St. George's Hall, at a cost not exceeding £3,000. The work will be spread over five or six years, the design and scheme being first submitted to the Council for approval.

THE Mosque at Woking, which was visited last week by the Shahzada, is Architecturally a beautiful place. The Screen behind the Pulpit shows Tunisian glass painting of sacred passages to perfection. On the carved Lectern to the right of the Pulpit rests a noble Koran in three large volumes—a royal but anonymous gift. Prayer-carpet and mats, suited to Sunni and Shiat worshippers respectively, cover the mosaic floor. In the adjoining room of the Imam of the Mosque there is a whole armoury of priestly weapons in the shape of pious mottoes, drawings of the Mecca shrines, Korans and Commentaries, and, as an Oratory, contains *facsimile* reproductions of a gateway and Mihrab from the Kaid Bay Mosque. The reservoir at which the worshippers wash their feet and hands is in a mosaic basin inside a crescent-shaped approach, screened from observation by a Karhonir gate closing two sides of a mound on and round which trees are planted instead of a railing.

THE beautiful Fresco painted over the Chancel Arch of the Artists' Parish Church, Mount's Bay, has been unveiled. The great picture follows the lines of the arch and angular roof, and is 42 feet high and 22 feet wide, covering in all about 300 feet superficial area. The subject, "Our Lord in Glory," is a striking one, and boldly treated by the Artist, Mr. G. Gregory Jones. Our Lord is represented standing on an orb, which is girded by the crown of thorns. He is holding the banner of victory with His left hand, and with His right hand giving blessing. A rainbow forms an arc overhead, and the nine choirs of angels, illuminated with rays of light, form a continuation of the halo around the Saviour's body. Lower in the Fresco are two full figures, the Cherubims with serpents, and further down on either side of the arch figures of Moses and St. Paul, representing the old and new dispensation. The walls on either side of the new oak Rood and Chancel Screen, are enriched with deep shades of orange red in cross-key patterns, whilst the massive granite Arch is divided from the Fresco by repeating patterns of *fleur de lis* in gold. There are in the Fresco 123 figures.

THE STATE OF KIRKSTALL ABBEY.

"RUDE REPAIRS."

BEFORE proceeding to patch the fragments of Kirkstall Abbey together, the Corporation of Leeds sought counsel from the Society of Antiquaries, and it was on the advice of that body, says a trenchant writer in a northern contemporary, whose views are clearly opposed to "ruthless restoration" but who is reconciled to the preservation of the remaining portions of the Abbey, that Mr. Micklethwaite, the Architect, and himself a member of the Society, was invited to undertake the duty. Mr. Micklethwaite's policy, judging it by such examples of his work as are already complete, appears to aim simply at the firmer establishment of those portions of the building which still remain above ground. He takes a shaky wall, and without attempting to reconstruct its parts, buttresses it where necessary in such a fashion that future generations will perceive at a glance that this was the original masonry, and that that was a mere buttress put up at the end of the nineteenth century to keep the wall from falling. In a number of instances, however, it has been found necessary to rebuild. Some of the arches in the Nave of the Church had lost the support of their original columns, and in order to preserve them the Architect was compelled to insert new shafts. His method of maintaining a distinction in such cases between the ancient and the modern workmanship is simple yet effective. The original pillars are round, whereas the new ones are merely blocked into a somewhat similar shape, but left unfinished. The difference, although only a difference in detail, is sufficiently self-explanatory. But Mr. Micklethwaite is not afraid of a startling contrast when he wants to make his meaning clear. For a daring example of his method one may take the treatment of the broken arch at the south-west angle of the Transept. Here the Architect has raised a new stone pillar which he carries to a great height, almost side by side with the original column, until it meets and supports the over-branching fragment of the arch. Nobody will every mistake this piece of work, considerable as it is, for anything but a gigantic prop. It is honest but incongruous, and at the sight of it the soul of the Philistine yearns for a compromise. There is perhaps only one notable instance of reconstruction pure and simple. Not long ago one of the minor beauties of the Church was the curiously ornate arch at the eastern extremity of the South Aisle, peculiar amidst its severe surroundings by the elaborate zig-zag decoration of the spandrels. When the Corporation took its present task in hand this part of the Aisle had just begun to give way. Pieces of the masonry were found lying on the ground. Fortunately none had been removed or destroyed, and accordingly they were replaced, without addition of any kind except the mortar by which they are held together. There are other examples of this kind of restoration, but none possibly quite so important or so grateful in its results.

Perhaps, however, it is too early yet to pass judgment upon the scheme. The work will not be completed till September. The only thing quite certain about it is that it will preserve for an indefinite stretch of time a relic in which the Ecclesiastical Architecture of successive periods between the twelfth and the sixteenth centuries is represented, and that in the meanwhile, and it may be for a long term of years, the purely pictorial — one might say the externally romantic — aspect of the ruins will be seriously marred. That is the price paid by us for a boon which posterity will enjoy. When, as a preliminary step, the ivy was forcibly divorced from the old stones to which it had clung for many generations, the act seemed almost fatal. But it was not to be avoided. Ivy will disintegrate stone and mortar as surely as it will caress the life out of a tree. One of the missions of the modern Archæologist is to go up and down the country stripping the loveliest bits of ivy from the most appropriate corners of interesting old buildings. At Kirkstall, it seems, we are to have an overgrowth of Virginia creepers to take the place of the banished evergreen. This may do something, for a season at any rate, to curve the sharp angles

and soften the crude patches which are now part of the form and colour of the Abbey. But we must look for our real consolation, apart from the practical one of the preservation of the ruins, to the new discoveries that have been made by the excavators. It is possible now to trace the whole plan of the great monastic pile which the first Abbot began to put together for the Cistercian Brotherhood more than seven hundred years ago. We know that they modified the appearance of the Cloister Court, still the most beautiful and, perhaps, the most complete part of the Monastery, by erecting a temporary roof on each side of it, so as to provide a sheltered walk in wet weather; and that in the cold season of the year they enhanced the comfort of this resort by screening a portion of it with curtains. The Guest-house, unearthed last year on the western side of the Abbey, is believed to be almost the only one remaining in England, and it will be guarded as a treasure. Other rediscovered relics are of a more portable character, and it is possible that the most interesting of them may ultimately be arranged under one roof.

PROFESSIONAL PARAGRAPHS.

MR. G. W. WILCOCKS, M.I.C.E., an inspector of the Local Government Board, has held an enquiry with reference to the application of the Carlisle Town Council for sanction to apply certain sums of money, amounting to £4,730, towards defraying a portion of the cost of the erection of the Art Gallery, Museum, and the buildings for the purpose of Art and Technical Instruction at Tullie House. The Surveyor, Mr. Howard-Smith, M.S.A., the Architect for the building, after giving evidence, conducted the inspector over the buildings.

At a sitting of the Consistory Court for the Diocese of Manchester, in the Derby Chapel of the Cathedral, before the Chancellor, a citation was decreed on the application of the Rev. Canon Jones, the rector of St. Mary's Church, Prestwich, and the Churchwardens, for a faculty to erect a new North Porch. The estimate of the Architects, Messrs. Austin & Paley, of Lancaster, is £200.

At the same Court, on the application of the Rev. Christopher Myers, Vicar of St. Bartholomew's, Bolton, and the Churchwardens, a citation was decreed for a faculty to complete the Church by the erection of a Tower in memory of the late Rev. Richard Loxham, of Great Lever. The cost of the work, amounting to £1,850, is being defrayed by the Rev. T. Loxham, of Great Lever.

For the erection of a Laundry at the Cross Deaf and Dumb School, Preston, the tender of Mr. J. Christian, builder, of Preston, has been accepted, at a sum of £1,335. The Architects are Messrs. Sames and Green, of Blackburn and Darwen.

THE Primitive Methodists, of New Shildon, Durham, are building new School buildings at a cost of £998. Mr. T. G. Henderson, is the builder, and Mr. J. W. Taylor, of Newcastle-on-Tyne, is the Architect.

MR. C. H. FOWLER, Architect, of Durham, has prepared plans for alterations to Snelston Church, near Norbury, Derby.

TENDERS are being advertised for new Hospital buildings at Rhyl, N. Wales, for the Royal Alexandra Hospital. The Architects are Messrs. A. Waterhouse, R.A., LL.D., and Son.

STRATHBUNGO Public School, which has been erected by the Govan Board, was recently opened by H. Shaw Stewart, M.P. Situated on a plot of 3,035 square yards, near Queen's Park Station, purchased from the patrons of Hutcheson's Hospital, the School is built in the Romanesque style of Architecture, is four storeys in height, and has accommodation for 1,438 pupils besides provisions for a Chemical Laboratory, Art Rooms, Laundry and Cooking Rooms, and Manual Instruction Workshops. The building measures 143 feet long by 76 feet broad. In the basement is a Swimming Bath 60 feet long by 17 feet wide. The cost of the building has been £17,166.

UPON the enlargement of Okehampton Workhouse it is proposed to expend £3,400. Detailed plans are to be sent to the Education Department for a new boys' School in East Street, Okehampton.

For the proposed new Workhouse for the Stockport Board of Guardians, Mr. W. H. Ward, Architect, has been instructed to prepare plans.

OUT of the twenty designs submitted for competition for the new Board School for Oaklands Mount, Harrogate, the following awards have been made:—First prize, £10 10s., Mr. T. A. Buttery, Architect, Queen Street, Morley; second prize, £6 6s., Mr. T. E. Marshall, Architect, James Street, Harrogate; third prize, £3 3s., Mr. George Bland, Architect, James Street, Harrogate. The estimated cost of the School on the above adjudication is respectively £3,147, £3,100, and £3,450.

AT Swansea the School Board recently held a meeting at which a report by Mr. E. R. Robson, Architect, on the proposed extension of Terrace Road School by underpinning was received. The report was considered satisfactory, and it was decided to proceed with the work. Contrary to the recommendation of the Building Committee the Board has decided to make the competition an open one.

BUILDING operations have been started on the new Wesleyan Chapel at Cross-in-Hand. The building will have seating accommodation for 150, with a Transept, holding 60, used as a School, and divided from the Chapel by sliding doors. It will be entered through a pretty Porch, built of half timber and red brick, there will be an open timber roof, and the pulpit is to be surmounted by a Gothic arch. The Architect is Mr. C. Bell, F.R.I.B.A., of Salter Hall Court, Cannon Street, London, and the builder Mr. Durrant, of Heathfield.

MR. JOHN SMITH, senior member of the firm of John Smith & Son, Architects, Shotley Bridge, near Consett, died on Sunday night week at the age of 75 years. He was a skilful artist, and designed many of the finest public and private buildings in North-west Durham. The deceased was for many years a member of the Renfieldside Local Board, and rendered valuable assistance as the Chairman of the Building and Sanitary Committee.

UPON the application of Mr. Delissa Joseph, F.R.I.B.A., the London County Council has given its consent to the formation of a new thoroughfare leading out of Crutchedfriars, to be called Rangoon Street. The street, which is the first street sanctioned in the City of London by the London County Council under the new London Building Act of 1894, cuts through the half-acre of land formerly occupied by the East and West India Dock Company's warehouses and recently sold by them.

THE Liverpool City Council has, upon the recommendation of the Library, Museum, and Arts and Technical Instruction Committee, decided to obtain competitive plans for the extension of the Museum buildings on the land bounded by William Brown Street, Byrom Street and Clayton Street, to be available in case such extension should at any time be determined upon, and to devote to this object out of the funds at their disposal a sum of not exceeding £200 to be given as a premium for the best designs.

PLANS were presented to the Town Improvement Committee of the Newcastle Corporation on Wednesday, for a large Theatre at Heaton for Mr. Weldon Watts, the lessee of the Queen's Theatre, Gateshead. We also understand that Mr. Watts has secured a very prominent site for a new Theatre in Gateshead. Mr. Hope is the Architect for both houses.

AN addition to the Yorkshire College, Leeds, erected at the expense of the Clothworkers' Company, London, was opened on Thursday afternoon by Mr. Sidney Wilson, the Master of the Company. It was stated that the Company had already expended £24,000 in building and equipment in connection with the Textile Department of the College, and had increased its annual subscription to £2,300.

IN connection with the building of the Flavel Memorial Congregational Church, Dartmouth, the Memorial Stone was laid on Thursday last by Mr. Seale Hayne, M.P. The Church, adjoining the New Ground, will consist of a Nave 58 ft. 6 in. long and 38 ft. wide, with recessed Organ Chamber, and will accommodate about 400 persons. The walls are being built of dressed limestone with buttresses, and the cost will be over £1,500. Mr. E. H. Back, Dartmouth, is the Architect, and the builder is Mr. Pillar, of the same town.

SOCIETY MEETINGS.

Glasgow Architectural Association.—Mr. Wm. J. Anderson, A.R.I.B.A., read a paper entitled, "The Early Development of the Christian Church," before Members of the Glasgow Architectural Association, last week. Mr. Anderson said that the history of early Church building was a subject of great importance in several aspects. To the Ecclesiologist it was of interest as the study of the earliest forms in which the Church was worthily realised, and it was his peculiar function to reconstruct its doctrines from its stones. To the Architect it was interesting in its evolution or gradual adaptation to its purpose, and as the chief link between classic and Mediæval Art. The former frequently attempted to construct the edifice on a pre-supposed symbolic basis, rejecting the aid of true Archæology, and deriving it from purely spiritual ideas; whilst the Architect found its prototype in the forms of surrounding buildings, the customs of the times and the habits of the race, under its necessity for provision for the wants of a new faith. The safest point of view was to reject symbolism in the plan and fabric of early buildings, and regard such purely as developments arising out of practical necessities. The art of planning or disposing buildings had at the time made great progress among the Romans, but one building was still the pattern of another to a greater extent than with moderns. It was rational to look for a model or models of the Church in the buildings which surrounded its inception. The lecturer proceeded to sketch the relation of the Church to society and public life during the early periods of its existence, and suggested the probable adaptation of a house on the Roman plan for the purpose of worship, and indicated the arrangement of the congregation. At times the waste places and catacombs were perhaps the chief meeting places of the persecuted sect. There the Christians had buried their dead, and had recourse to these hiding places for secret assembly and communion; probably these catacombs were held in veneration long after the necessity for using them had ended. Considering the other buildings with the forms of which the early Christians must have been familiar, the lecturer dealt with the possible influence of the Roman basilica or Law Court, and concluded that it was difficult to credit the theory that these buildings were ever used as Churches. Certainly this could not have happened till the time of Constantine, under whose reign the Christians emerged into the light of Imperial favour. Even then the Law Courts would be required for business purposes, and the only buildings which became useless were the Temples of the gods. It was a mistake to assume that there were no Christian Churches previous to the time of Constantine. There were frequent and long periods of toleration during the first three centuries, and there was every reason to believe that Churches were built and other buildings employed and adapted previous to the reign of Constantine, even in Rome itself. The lecturer was inclined to think that in such temporary abodes, a long process of adaptation to the forms of service must have been going on, which ultimately took form in the huge basilican Churches erected in Constantine's day. The key to the diversified types of plan, and perhaps in some measure to the general problem, was possibly the persevering continuance through everything of varying heathen superstitions and practices. The Arts of the Roman Empire came everywhere under the influence of the capital, yet Religion preserved its local colour and form. In order to understand the peculiarities of plan of the early Churches, it was necessary to have some idea of the customs of their services. The essayist described fully the service and the relative position of the four orders of catechumens or penitents to those in full communion. A description followed of the normal form of basilica Church, after Constantine.

Society of Engineers.—An ordinary meeting of this Society was held at the Royal United Service Institution, Whitehall, last evening. A paper was read on "Safety Appliances for Elevators" by Mr. Herbert W. Umney, of which the following is a synopsis: Pipe failures in Hydraulic lifts—Cause, effect,

prevention and remedy—Relief valves—Diaphragms—Formula for size of orifice—Ram grips—Break valve—Speed of falling lifts—Safety gear attached to cages of suspended lifts—Overhead and underneath spring gear—Stresses in wire ropes—Balance lever gear—Additional safety line governor gear—Inertia weight gear—Mathematical calculations—Compressed-air gear—Result of experiments—Relative efficiency of the different arrangements—Periodical testing of apparatus.

SAWDUST.

LORD FEVERSHAM has now completed the rebuilding of Duncombe House, which was destroyed by fire fifteen years ago. He has laid out £40,000 on the structure.

A COMPETITION among Italian artists has been set on foot for the execution of a reproduction in marble of the alto-relievo of the Lion of St. Mark with the Doge Gritti. This alto-relievo formerly ornamented the terrace above the piazzetta of the Ducal Palace in Venice. The winner of the competition will be given two years in which to complete the work, the price for it having to be decided by a Commission appointed by the Italian Minister of Public Instruction.

AN illuminated window, designed by Princess Louise (Marchioness of Lorne), has been erected at St. Anne's Church, Bagshot, in memory of the late Sir Howard Elphinstone, at the joint expense of the Queen, Princess Louise, and the Duke and Duchess of Connaught.

THE improvements which have been in progress in Lord Rosebery's house in Berkeley Square are nearly completed. The result will be to transform the sombre uniform frontage into a bright expanse of red brick, relieved by great bows and ornamental work, which will all harmonise very well with the red sandstone entrance. The house has been raised two storeys and a high modern roof put on.

THE Gloucester City Council has accepted the tender for iron pipes sent in by Messrs. Cochrane and Co., at £10,373. It has also decided to apply to the Local Government Board for sanction to borrow a sum not exceeding £5,000, for erecting a proposed sanitary depot and stabling, and a sum not exceeding £3,000, for works of street improvement, sewerage, and water supply.

ON Tuesday last, the Memorial Stone of the large and commodious Liberal Club premises which are being erected at Yeovil, was laid. The building will contain a roomy Entrance Hall, suitable Committee Rooms, a Billiard Room, Reading Room, and Library and Assembly Hall, the total cost being about £2,000.

MR. DANIEL WATNEY, the new President of the Surveyors' Institute, was one of the original members of the powerful Great George Street organisation. He is surveyor to the Mercers' Company, the Gresham Committee, and the Land Surveyors' Club, and a valuer to the Board of Trade. As a practical authority on the value of real property compulsorily acquired he stands in the front rank.

"RIVERSIDE STATION," is the name decided upon by the Dock Board for the new Station at Liverpool, which does not appear to quite give satisfaction to the Liverpoolians who would much prefer the high sounding title of "The Atlantic Railway Station," a name which they say expresses so well the main idea in the construction of the new line.

MR. B. P. BARNATO, of mining market fame, is the purchaser of No. 7, Great Stanhope Street, which adjoins the town residence of Baron Alfred de Rothschild. It is Mr. Barnato's intention to have the site cleared and a Mansion erected for his own occupation.

THE Committee of the Royal Ear Hospital, Frith Street, Soho Square, is appealing for funds to erect a new building. It is intended that the new building should include suitable accommodation and appliances for a School of Otology. The cost of erecting and fitting a suitable building is estimated at £20,000.

THE longest telephone-wire span in the World has just been completed. It is stretched across Lake Valen in Switzerland, connecting the town of Quinten, near Leistmann, with Murg. The total length measures about 80,000 ft.

ON Wednesday last, the anniversary of the Battle of Magenta, was performed the ceremony of unveiling the Monument erected to the memory of the late Marshal MacMahon. The Monument, which is the work of the Sculptor Secchi, has been erected by public subscription.

ACCORDING to the St. Petersburg *Novoye Vremya*, the Tsar has approved of the opening of a subscription throughout Russia for the erection of a Monument to the great French chemist Lavoisier.

THE first portion of the new Church for East Aldington, now being built, is nearing completion, the roof being in hand. The amount already spent for the part constructed is £5,000.

AN important scheme of College Extension will be considered by the Primitive Methodist Conference at Edinburgh. Two alternative schemes have been under the consideration of the College Committee, one providing for 20 additional students and a basement Kitchen, to cost £6,400; and the other providing for the same number of students, with new Library and Kitchen on ground floor, to cost £7,100, and the latter scheme has been recommended to the Conference for adoption.

THE Memorial Stone of a new Wesleyan Mission Hall, in Holderness Road, Hull, has been laid by Mr. Clarence Smith, M.P. The building is to accommodate 250 persons and will cost £1,110.

THE Colne Urban District Council, in response to an express wish from ratepayers and farmers, has decided to erect a new Cattle Market on a site of ground in Dockray Street, and application is about to be made to the Local Government Board for sanction to borrow £7,000 for that purpose. Colne has one of the oldest Cattle Markets in the land.

COLONEL W. M. DUCAT, R.E., held an inquiry at Newcastle-under-Lyne, for the Local Government Board, at the Town Hall, concerning the sanction to a fresh loan of £2,500, for the carrying out of the following public improvements which have recently been decided upon by the Corporation. The purchase of the Barley Mow Inn, Lower Street, for the purpose of widening a narrow and much frequented thoroughfare; a new Bridge over the Lyme Brook, at the bottom of Clayton Road; the conversion of the old School of Art premises for the purpose of giving more accommodation to the Fire Brigade; new hydrants, street improvements, and sewer extensions.

THE Prince of Wales has consented to become patron of the proposed Institute for Soldiers and Sailors to be built at Norwich.

AT the annual meeting of the Shipbuilding and Engineering Federation, held in the City Hall, Glasgow, on May 29th, it was resolved to take a vote of the whole of the societies comprising the Federation as to the propriety of admitting unskilled workmen's trade unions into the Federation. A resolution was also passed condemning the Government for persisting in giving work to and retaining upon the list of the Admiralty those firms in the London district who refused to pay their workmen the standard rate of wages.

THE whole of the loan of £9,500 borrowed in 1866 for the building of the Town Hall, Court-house, and Shambles, Retford, has been paid off. The last instalment was not due until 1896, but the Council has been able to pay all off, including an additional £500 borrowed on the Court-house.

THE financial statement of the various items of expenditure in connection with the erection of Colne Town Hall shows that the erection (exclusive of the site) has cost £10,297 8s. 10d. The clock and chimes cost £535 5s., making a total outlay of £10,832 13s. 10d. on the building. £12,000 was generally considered to be the outside cost.

AN ample number of guarantors have now been secured for the scheme of erecting a new Conservative Club in Market Street, Colne, at an estimated cost of £4,000. Accommodation will be provided for three billiard tables, Reading and Conversation Rooms, and Smoke Room, as well as a Lecture Hall. The excavating works have just been commenced, and the whole of the works will be carried out in a substantial manner.

The Builders' Journal
COMPETITIONS.

No. 3.—Swimming Baths.

Mr. John Johnson has kindly undertaken the task of adjudicating upon the designs in this Competition, and his award will be announced in due course.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

ANNOUNCEMENTS.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.
All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.
Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.
Prepayment in the above Advertisements is absolutely necessary.
Page or Paragraph Announcements, Trade Advertisements.
Prices on application.
Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

A SITE has been purchased at Swindon on which to erect a Presbyterian Church to seat 600 person at a cost of £5,000.
The ancient Parish Church of Bunbury was re-opened on Wednesday last after being restored and provided with a new organ, at a cost of close upon £3,000. The Church, which is one of the most interesting buildings of its kind in Cheshire, from an Archæological point of view, was built in the reign of Edward III., on the foundation of a Norman Church. Mr. R. Brocklebank gave £1,000 towards the present restoration, and the Duke of Westminster and Lord Tollemache each £100, while the choir stalls were the gift of Mr. Hugh Aldersey, of Aldersey Hall.

Trade and Commerce.

We shall be glad to receive copies of catalogues from firms engaged in the allied building trades. These will be carefully looked through, any novelty noted, and—should its nature seem to demand it—fuller attention drawn thereto. We are particularly wishful to secure the friendly interest of designers and artificers in THE BUILDERS' JOURNAL, and, now and then, we might see our way to reproduce an outline sketch or illustration of any contrivance that struck us as being new or needed. Building covers up—figuratively, and in fact—so much ground, and we mean to cover the whole of it.
We should be further obliged if firms would indicate, by some suitable mark, the pages in their catalogues to which they would, in particular, desire to call our attention.

The Building Trades Crisis. Workmen's Manifesto.—An important development is pending in the crisis in the London building trades. The workmen, who have hitherto assumed the defensive, for the preservation of the 1892 agreement, now threaten to take the aggressive if an early settlement is not effected. In a manifesto which the London Building Trades' Federation has issued to the Union, the Executive declare that: "On the question of sub-letting, and the 'no disability' clause which the employers wish to insert, the attitude of the workmen remains what it has always been, and the probability of their departure gets more remote as time advances. So long as these demands are kept to the front by the employers, so long will the way be barred to a settlement." The manifesto then proceeds: "Only a formal acknowledgment has been received from the master builders in response to the workmen's communication (rejecting arbitration, and asking employers to resign the 1892 agreement), and no knowledge of their intentions can be gleaned. This suspense can only end unprofitably to those responsible. If, during the ensuing summer, the workmen are to be deprived of a code of rules through the employers' stubborn insistence on the conditions they seek to impose, then it will remain for the workers to consider whether they are to be compensated for the annoyance and disturbance which has been brought about. In the absence of such rules there will be nothing to prevent the trades from making efforts to remodel the terms of 1892 on their own basis, and in ceasing to be content with the conditions which that agreement brought into existence, and with which, up to the present, they have declared themselves satisfied."

The Public and Caergwrle Castle.—A case in which great interest was taken in Flintshire, came before the Caergwrle Justices on Thursday last. It affected the public right to use Caergwrle Castle and grounds of which Lord Derby is the freeholder, and Mr. Eccleston, a local publican, the tenant. The castle and grounds are a favourite resort for excursion parties, and Mr. Eccleston has laid out a portion of the hill for dancing, the green being enclosed by fencing. Parties resorting to the castle ruins have paid Mr. Eccleston a nominal fee for the privilege, but of late the public thought their rights were being encroached upon, and numbers of boys played football on the enclosed green and damaged the fences. Five boys were accordingly summoned yesterday, Mr. Eccleston stating that he brought them there to try his title. Evidence was given by some of the oldest inhabitants as to uninterrupted user by the public of the castle and grounds. The magistrates, however, found that some damage had been committed, and fined each defendant 6d. and 4s. 6d. costs. They expressed no opinion as to public right. A special case was asked for, and it will probably be argued in the Court of Queen's Bench.

Jellis's Tables.—Mr. R. J. Bush, the publisher of 92, Fleet Street, sends us Mr. John Jellis's tables for cubing timber. A glance at this little indexed booklet shows the Surveyor the cubic capacity of his logs. A very handy and useful little thing.

Building Society Mortgages.—Mr. Fred. Wetherfield, Solicitor of 1, Gresham Buildings, City, writing in a contemporary, says:—"The wonderful ways of building societies do not usually come out into the light of day until these concerns are in liquidation; but when this happens we see some strange things. A recent case, affecting the well-known Portsea Island Building Society (*Times*, May 21), is an example of the way rules are worded in order that money may be raised somehow or other. It appeared that this society had already exceeded its borrowing powers when, being short of funds, it wished to get a loan from the Imperial Life Assurance Co., and so a plan was hit upon by which the matter might be managed. A man named House had borrowed £17,000 of the society on the security of some property. It was now arranged that House should borrow £6,000 of the insurance company, on the security of the property mortgaged to the society, which would join in the new mortgage, on the understanding that this £6,000 would be paid over to it, the society consenting to let its claim for the balance of £11,000 be postponed. This was done; the society got the £6,000, out of which it paid all expenses. The deeds, &c., were handed over to the insurance company, which thus became first mortgagee, while the building society, of course, took the position of second mortgagee for its £11,000 due from House. All would doubtless have been well; but, unluckily, the society went into liquidation, and now the liquidator, acting for the creditors, came to the Court and asked that the whole transaction should be declared void, as being *ultra vires*, and against the rules of the society itself. It was, of course, a rule with this society, as with all others, that no money should be advanced upon the security of a second mortgage, and although this ingenious arrangement tried to hide this fact as far as possible, it is obvious that all the building society had left for its £11,000 was a second mortgage coming after the first mortgage to the insurance company for £6,000. The Court of Appeal affirmed the judgment of Mr. Justice Romer, declaring the transaction *ultra vires*. Nor would they allow the insurance company to stand as creditor of the society, because it had in form lent its money to House. If the Court had held otherwise, it would practically have enabled a building society both to exceed its borrowing powers and to lend money on second mortgage. The case may seem a hard one, for the insurance company loses its money; but, on the other hand, all the parties knew very well what was the real nature of the arrangement, although they left out of account the liquidation which followed, and which has upset the whole thing."

SAWDUST.

A MONUMENT to M. Carnot is to be erected in Limoges, his native city. The inhabitants have subscribed 45,000f. towards the Memorial, and a competition with respect to the plan will be thrown open to French sculptors. The bronze has been furnished by Limoges, and it is stipulated that the work must be ready by March 15th, 1896.

A NEW and interesting Egyptian Tablet has just been placed on exhibition in the Sculpture Gallery of the British Museum. The new arrival measures 3 ft. 10 in. in length by 2 ft. 1½ in. in height. At one end are the names and titles of Usertesen III., B.C. 2,300, together with his Ka, or banner-name, viz., *Heru Ankh Mestu*. These inscriptions are curiously engraved in high relief, and divided by a kind of canopy or tent.

A GREAT International Prize Competition and Summer Photographic Exhibition will be held from June 29th to July 6th next at the Agricultural Hall, Islington. There will be two distinct competitions—one under the Conference Rules, with Messrs. Hinton, Lambert, and Robinson as judges, in which the classes are as follows:—Landscape, Sea-scape, Hand Camera Work, Animal Study, Architecture, Scientific Work, Process Work, and Snap-Shot. Gold, Silver, and Bronze Medals are offered in Classes 1 to 4, and Silver and Bronze Medals in Classes 5 to 12.

THE members of the Mekran Mission have come across a collection of strange tombs on their march. The Mausoleums were nine in number, each of them a two-storeyed building surmounted by a dome. A Philistine pickaxe applied to the wall could make no impression; but an opening sealed up with mud was discovered, and the loosing of the seal of the upper storey revealed numerous skeletons clad in bright-coloured garments. In the lower storeys loose bones were stored with less concern, and some of them were of considerable size, "evidently those of a race of giants."

ON Nalachucky River, in the United States, there is one of the most peculiar of stone formations existing. It is known by the name of the "Devil's Looking Glass," a name which gives rise to a curious reflection, to wit the frequency with which stone formations, as in our own country, for instance, are prefixed by the common term for his Satanic majesty. The "looking-glass" in question is a palisade, which rises abruptly from the river to a height of about 200 feet. It is perfectly smooth, and about 100 feet wide. When the sun is at a certain stage it throws a shadow over the water, and reflects the sunbeams as a mirror would, dazzling the eyes of the beholder, sometimes almost blinding him with its brightness.

A REPORT of Messrs. Bramwell and Harris, engineers, respecting the sewage of Derby will be presented at a meeting of the Town Council to-morrow. It is proposed to erect a Sewage Pumping Station at Litchurch, at a cost of about £20,000. The sewage will be turned into a series of underground tanks, and will then undergo a chemical process of purification, and after being pumped to a higher level the effluent will be filtered into the river Derwent, close to Borrowash Mills. The cost of the whole scheme is estimated at about £82,000, and the annual cost of working will amount to about £7,500.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ABERDEEN (N.B.)—For widening the Bridge over the river Bogie, at Huntly. Mr. J. Barron, C.E., 166, Union-street, Aberdeen:—

Gibson, Thomas	...	...	£1,427 0 0
Hollom, J. B., and Co.	...	...	1,245 7 0
Gauld, Edgar	...	...	897 13 6
Porter, David	...	...	864 9 9
McKinnon, W., and Co.	...	...	841 7 10
Abernethy, J., and Co.	...	...	826 7 10
Cleveland Bridge and Engineering Company	...	...	778 4 5
Findlay, A., and Co.	...	...	731 0 0
Somervail and Co., Dalmuir, near Glasgow (accepted)	...	...	712 6 11

BANGOR (Wales).—For the erection of Congregational Chapel, Glasfryn. Mr. Richard Davies, architect, Bangor:—

Williams, R. and I., Upper Bangor	...	...	£760 0 0
-----------------------------------	-----	-----	----------

RENDLE'S

"INVINCIBLE"

GLASS ROOFING

DETAILS, MODELS & ALL INFORMATION FROM
5, Victoria Street, LONDON, S.W.

ASTRAGALS
OF
COPPER ORZING

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three thousand to any London or
Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

METAL
CASEMENTS of
every description.
GLASS ROOFING
Shelley & Co's & Hopes Patents

HENRY 55
HOPE LIONEL
ST.
BIRMINGHAM
LONDON, 13 King St
Cheapside.
MAN -
-CHESTER 8 Exchange
Arcade.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO. Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

BEIGHTON.—For the extension of school buildings, Beighton, near Sheffield, for the School Board of Beighton. Messrs. Hemsoll and Paterson, architects, Imperial Chambers, Sheffield. Quantities by the architects:—

Pinder, Bros., and Bowl	...	£4,089	0	0
Ash, Son, and Biggin	...	3,880	0	0
Wright, G.	...	3,683	0	0
Sykes, J. W.	...	3,640	10	0
Thorpe, B.	...	3,498	10	0
Walker, J., and Sons	...	3,300	0	0
Fidler, J.	...	3,298	0	0
Staveley, T.	...	3,260	0	0
Roper, T.	...	3,099	0	0
Bolsover, Bros., Ridgeway (accepted)	...	3,053	14	0

BROMSGROVE.—For the erection of new shoe factory and premises, Bromsgrove, for Messrs. Fussell & Drury. Messrs. Mosley & Anderson, architects and surveyors, Goodyear Chambers, Northampton:—

	Factory.	Glazed Bricks.	Wood Block Floors.
Morris and Atkinson	6,200	134	337
Leadbetter, J.	5,980	59	56
Payne, W.	5,224	141	67
Green, J. R.	5,095	225	—
Bishop, W.	4,990	110	202
Tilt and Weaver	4,936	75	269
Edwards, D.	4,850	150	250
Charles, E. J.	4,800	105	750
Giles, L.	4,800	102	800
Horton, C. A.	4,700	85	242
Smith, H.	4,683	123	337
Guest and Sons	4,620	147	213
Lowe and Son	4,620	105	250
Dorset and Son	4,600	98	303
Brazier, J.	4,590	100	275
Hughes, R. M.	4,421	160	200
Jones and Son	...	...	...
Sedgley (accepted)	4,300	129	300
Architect's estimate	4,400	150	225

BRIDGEND (Glam.).—For the erection of church, Brynecroft, for the Rev. Henry Lewis. Mr. E. J. Williams, architect, 14, High-street, Cardiff. Quantities by architect:—

Rattray and Jenkins	...	£1,800	0	0
Ford, A. G., and Co.	...	1,660	0	0
James, G., and Son	...	1,550	0	0
Willcock, H., and Co.	...	1,549	0	0
Hatherly and Carr	...	1,457	0	0
Haines, John	...	1,371	0	0
Jones, D. C., and Co.	...	1,357	0	0
Cooksley, C. H.	...	1,315	0	0
Howell, A. J., and Co., Cardiff *	...	1,291	5	8

CAMBRIDGE.—For erecting a residence in Gresham-road, Cambridge, for Mr. C. Williams. Mr. Sidney French, architect, Llandaff-chambers, Regent-street, Cambridge:—

Bell and Son	...	£1,487	0	0
Kidman	...	1,453	0	0
Kerridge and Shaw	...	1,440	0	0
Saint (accepted)	...	1,336	0	0

[All of Cambridge.]

CATFORD.—For erecting Wesleyan chapel, Rushey Green, Catford. Mr. Chas. Bell, architect. Quantities by Messrs. Stanger & Son:—

Wall	...	£4,825	0	0
Allen and Sons	...	4,701	0	0
Nightingale	...	4,578	0	0
Holloway Bros.	...	4,479	0	0
Parker, G.	...	4,350	0	0
Laird	...	4,318	0	0
Edwards and Medway	...	4,306	0	0
Outwaite and Son	...	4,245	0	0
Smith and Son	...	4,233	0	0
Holliday and Greenwood	...	4,126	0	0
Staines and Son	...	4,094	0	0
Jerrard and Son	...	4,083	0	0
Williams, Howell J.	...	4,045	0	0
Goad	...	3,995	0	0
Anley, J.	...	3,930	0	0
Grady (accepted)	...	3,912	0	0

CARTER & CO TILES MOSAIC FAIENCE Poole Dorset

CHEAM.—For alterations and additions to residence, Cheam, Surrey, for Mr. E. Boniface. Messrs. Inskip and Mackenzie, architects, No. 5, Bedford-row, London, W.C.:—

Easterbrook and Son	...	£2,880	0	0
Oldrey and Son	...	2,535	0	0
Hunt	...	2,387	0	0
Humphreys	...	2,198	0	0
Ookenden	...	2,175	0	0
Potter	...	2,174	0	0
Balchin and Shopland (accepted)	...	2,147	0	0
Harris	...	1,990	0	0

CROYDON.—For new billiard-room and other additions to the "Royal Oak" Inn, Surrey-street, for Messrs. Page and Overton, Limited. Mr. Alfred Broad, architect, 3, High-street, Croydon. Quantities by the architect:—

Page, S.	...	£1,473	0	0
Hanscomb and Smith	...	1,460	0	0
Saunders, E. J.	...	1,437	0	0
Bulled, E. P., and Co.	...	1,419	0	0
Smith, J., and Sons	...	1,416	0	0
Lascelles, W. H., and Co.	...	1,383	0	0
Smith, W., and Son	...	1,359	0	0
Lorden, W. H., and Son	...	1,347	0	0
Baker, D. W.	...	1,340	0	0
Bullock, A. *	...	1,189	0	0

* Accepted.

GREAT BENTLEY.—For erection of schools and board-room, boundary walls, playgrounds, earth closets, &c., and master's residence, for the Great Bentley School Board, Essex. Mr. J. W. Start, F.S.I., architect, Colchester, Clacton-on-Sea and Harwich. Quantities by architect:—

Gladwell, H.	...	£3,346	0	0
Canham, T.	...	3,336	0	0
Chambers, W.	...	3,329	0	0
Orleur, E. C.	...	3,305	0	0
Beaumont, R.	...	3,084	0	0
Linzell, H. J.	...	2,988	0	0
Dupont, F.	...	2,943	0	0
Girling and Coe	...	2,923	0	0
Badcock, E. B., and Maxey, C.	...	2,852	0	0
West E. (accepted provisionally)	...	2,750	0	0

HULL.—For the erection of St. Wilfrid's Church, The Boulevard, Hull. Smith, Brodricke and Lowther, Architect Hull. Quantities by I. Watson, Hull:—

Lyons, A., Norton, Malton	...	£3,672	5	0
Blackburn and Son, Hull	...	3,649	0	0
Goates, T.	...	3,605	0	0
Skinner	...	3,589	10	0
Southern	...	3,583	0	0
Houlton, G.	...	3,565	0	0
Jackson, G. and Son	...	3,526	0	0
Robinson, D.	...	3,480	0	0
Drury, J.	...	3,478	0	0
Hall, F.	...	3,348	0	0
Colley and Levitt (accepted)	...	3,222	0	0

HARROW.—For the erection of four pairs of villa residences Messrs. Marshall and Vickers, architects. Quantities by Messrs. E. J. Pain and Son:—

Lee, H.	...	£8,596	0	0
Adamson, T.	...	8,474	0	0
Turner, T., Ltd.	...	7,880	0	0
Bell, W., and Son	...	7,724	0	0
Chinchen, F. T., Kensal Green *	...	7,688	0	0

* Accepted.



10,000

Complete Sets of

N. A. P.

WINDOW FITTINGS

Adopted in

ONE MONTH.

N.A.P. Window Co., 159, Victoria St., S.W.



LONDON.—For the substructure of the Borough Theatre, Stratford, E. Mr. Frank Matcham, architect. Quantities by Mr. Frederick Thomson:—

Atherton and Latta	£2,518	0	0
Maddison	2,389	0	0
Watson	2,350	0	0
Toms	2,266	0	0
Reed, A., and Sons	2,225	0	0
Lamble	2,187	0	0
Holloway Bros.	2,148	0	0
Jackson, John	2,100	0	0
Chamberlain Bros.	2,097	0	0
White, T., and Son	2,080	0	0
Perry and Co.	2,066	0	0
Walsh and Co.	2,015	10	0
Harris and Wardrop	1,973	0	0
Gregar and Sons	1,907	0	0
Carter, Argent-street, Grays*	1,919	4	0
Gladding (withdrawn)	1,748	0	0

* Accepted.

LONDON.—For the erection of steam laundry and cottage at the Infirmary, &c., Bancroft-road East, for the Guardians of Mile End Old Town. Mr. Chas. F. Burden, architect, Workhouse, Bancroft-road, E.

Barker, G., and Co.	£7,642	0	0
Shewin, H. H.	7,428	0	0
Gladding	7,342	0	0
Pecky, C.	7,339	0	0
White and Son	7,249	0	0
Carter	7,193	0	0
Wood, F. F. J.	7,139	0	0
Kirk and Randall	7,062	0	0
Perry and Co.	6,827	0	0
Cooper, Upton-park, Essex*	6,574	0	0

* Accepted.

LONDON.—For alterations to "The White Conduit Tavern," Barnsbury-road, Islington, N., for Mr. C. Lacey. Mr. Richard Dickinson, architect:—

Turtle and Appleton	£1,170	0	0
Street	1,158	0	0
Johnston	1,058	0	0
Deering and Son	1,017	0	0
Beer and Gash	981	0	0
Edwards and Medway	886	0	0

LONDON.—Accepted for alterations to staircases, &c., of main building, and for addition of laundry building, &c., at East-lane Bernonsey School, for the School Board for London. Mr. T. J. Bailey, architect:—

Line, Henry, 185, Upper Thames-street, E.C.	£900	0	0
---	------	---	---

LONDON.—Accepted for repairs and decorations at Billiter-buildings, E.C., as per revised and amended specification. Mr. F. H. Houldsworth, architect:—

Line, Henry, 185, Upper Thames-street, E.C.	£622	0	0
---	------	---	---

LONDON.—For building pork-curing stores and shop on Foyle-road and John-street, for Mr. James Mitchell. Mr. William Barker, architect, 25, Orchard-street, London-derry:—

Colhoun, R.	£677	7	0
McClelland, M.	645	0	0
Colhoun, J.	615	0	0
Shannon, J.	600	0	0
Maultsaid, W. J.	575	0	0
Fulton, J. (accepted)	465	0	0

Note.—Plumber and gasfitter's work not included.

MAIDENHEAD THICKET (Berks.).—For the erection of new house. Mr. Arthur Vernon, architect, 29, Cockspur-street, London, S.W., and High Wycombe:—

Hollis	£1,995	0	0
Barker	1,875	0	0
Gibson	1,750	0	0
Webster	1,750	0	0
Silver	1,674	0	0
Loosley (accepted)	1,517	0	0

NEWCASTLE-ON-TYNE.—For the erection of a block of semi-detached cottages, at Benton Grange, for the Jesmond and Gosforth Laundry Company, Limited. Messrs. Badenock and Bruce, architects, 21, Pilgrim-street. For one block:—

Weatherley, Edward	£967	10	0
Curry, Thomas	967	10	0
Slater, John, and Son	955	10	0
George, E. and F.	925	0	0
Maughan, N. W.	920	10	5
Wells, G. and C.	865	16	0
Simmons, Robert	790	10	0
Jackson, John (accepted)	763	11	2

NEWPORT (Mon.).—For pulling down and rebuilding the "Foaming Tankard" and two adjoining shops and houses, Cross and Fothergill-streets, Newport, Mon., for Messrs. W. Hancock and Co. Mr. W. L. Griffiths, architect, Newport, Mon.:—

Mordecai, J.	£3,115	0	0
Stephens, Bastow & Co., Limited	2,965	0	0
Evans, T.	2,800	0	0
Jones and Co.	2,697	0	0
Hatherley and Carr	2,660	0	0
Parfitt, A. E.	2,539	0	0
Jenkins, J.	2,500	0	0
Linton, J.	2,395	0	0
Linton, W. A., Newport (accepted)	2,329	0	0

PONTYPOOL.—For the erection of school buildings (West Monmouth), for the Haberdashers Company. Mr. Henry Stock, architect, Denman-street, London Bridge, S.E.:—

Morgan and Evans	£29,377	17	0
Allen, James	29,230	0	0
Shillitoe and Son	28,400	0	0
Lock, Charles	27,650	0	0
Hatherley and Carr	27,298	0	0
Cowlin, W., and Son	27,197	0	0
Lissaman, W., jun.	26,350	0	0
Perkins, John	26,319	0	0
Smith, Henry	26,215	0	0
Jones, W., and Son	26,067	0	0
Claridge and Bloxham	25,973	0	0
Wilkins, G. H.	25,740	0	0
Jenkins, J.	25,000	0	0
Willcock, H., and Co.	24,675	0	0
Robinson, W.	24,614	0	0
Gradwell, W., and Co.	24,224	6	0
Linton, John	23,705	0	0
Warburton, Saml.	23,685	0	0
Bowers, W., and Co.	23,347	0	0

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.

Telegrams, "OLDACRES, LONDON."

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.

SLATE MERCHANT, SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

NEW SOUTHGATE.—For erecting new studio for the Stereoscopic Co., Ltd. Mr. W. H. Harrison, architect:—
Chinchen, F. T. ... £570 0 0
Sellwood ... 455 0 0

OXFORD.—For detached villa and stabling at Oxted, Surrey. Mr. John Jas. Downes, architect, 11, The Parade, Lewisham High-road, S.E.:—
Longley and Co. ... £1,895 0 0
Lorden and Son ... 1,644 15 0

RICHMOND.—For erecting the Secondary Schools and Technical Institute, for the Surrey County Council. Messrs. Fryer and Bath, architects, Queen Anne's-mansions, Westminster, S.W., and Richmond. Quantities by Messrs. J. and A. E. Bull, Craven-street, W.C.:—

Britton, F.	£7,315	0	0
Messom, J. T.	7,275	0	0
Speechley and Smith	6,988	0	0
Godson, G., and Sons	6,931	0	0
Johnson and Co.	6,870	0	0
Brooking, J. W., Richmond*	6,868	0	0

* Accepted with modifications.

SWINDON.—For the erection of the Clarence-street School, Swindon, for the Swindon School Board. Mr. William Drew, architect, 22, Victoria-street, Swindon. Quantities by the architect:—

Benfield and Loxley	10,800	0	0
Jones, D. C., and Co.	10,747	0	0
Long, J., and Sons	10,743	0	0
Leighfield, J.	10,537	0	0
Forse, H. A.	9,998	0	0
Flewelling, H.	9,805	0	0
Wilkins, G. H.	9,774	2	4
Barrett, T.	9,609	0	0
Jones, W.	9,487	0	0
Hunt, C. H.	9,333	0	0
Williams, C., Swindon*	9,276	14	0

* Accepted subject to the approval of the Education Department.

STREATHAM HILL.—For repairs and decorations at "Broadlands," Streatham-hill, for James Clark, Esq. Mr. John Jas. Downes, architect, 11, The Parade, Lewisham High-road, S.E.:—

Sayer, 86, New Kent-road	£419	0	0
Candler and Son, 258a, Brixton-hill*	369	0	0

* Accepted.

CONTRACTS OPEN. BOROUGH of SHOREDITCH.

TOWN HALL.
TO PAINTERS, DECORATORS, &c.
The Vestry of the Parish of St. Leonard, Shoreditch, invite TENDERS for PAINTING and DECORATING the INTERIOR and EXTERIOR of the TOWN HALL, Old-street, E.C., including the Large Hall, Staircases, Council Chamber, Vestibule, Committee Rooms, Offices, &c.

A copy of the specification and form of Tender may be obtained upon application at the office of Mr. T. RIDYARD ROSCOE, Surveyor to the Vestry, Town Hall, Old-street, E.C., between the hours of TEN and TWELVE a.m. accompanied by the payment of a deposit of £10 which will be returned after the Contract has been decided upon in the case of a bona-fide Tender having been received.

The person or firm whose Tender is accepted will be required to enter into a bond with two approved sureties in the sum of £100 each and to pay the workmen employed by him on the work such rates of wages and observe such hours of labour as are recognised by the trade unions.

Sealed tenders filled up on the official form and endorsed "Tender for painting, decorating, &c.," to be delivered at my office, not later than FOUR p.m. on MONDAY, JUNE 17th, 1895.

The Vestry do not bind themselves to accept the lowest or any Tender.

By order, H. MANSFIELD ROBINSON,
Solicitor and Vestry Clerk.

Town Hall, Old-street, E.C.
May 28th, 1895.

SPHINCTER WORKS,
EMERSON STREET, LONDON, S.E.,
MANUFACTURERS OF
LECLANCHE BATTERIES, TELEPHONES,
ELECTRICAL THERMOGRAPHS,
WATER TELEGRAPHS, and COMPLEX
COMMUNICATIONS of all kinds.

The Builders' Journal.

Vol. I., No. 19.

Tues., June 18, 1895.

ILLUSTRATIONS.

South Aisle, Henry VII. Chapel at Westminster:
Drawn by F. T. W. Goldsmith 289
The Architectural Association..... 291
Aberlady Church, N.B.: William Young, Architect 293
The Amsterdamsche Poort, Haarlem:
Sketched by F. T. W. Goldsmith 295

Gosford House, for Earl Wemyss:
Addition by William Young 296
A Corner of Glasgow Municipal Buildings:
William Young, Architect 297
North-East Angle of Lady Chapel, York Minster:
Sketched by C. E. Mallows 299
Our Swimming Bath Competitions: Plans 303

CONTENTS.

"Craftsmen" 289
The New Council of the Institute 289
The "Destruction" of Edinburgh 290
The Norman Chapter House at Durham.. 290
Bricks and Mortar 292
Men who Build, No. 17.—Mr. William Young 296

Constitution of the R.I.B.A. 298
The Finest Villa in the World 298
Ancient Church Architecture in the
Midlands 298
New Cathedral at Westminster 299
The A.A. Dinner 300

North of the Tweed: Notes from Glasgow 301
Quaint Church, West Cornwall 302
Swimming Bath Competition 304
The Builders' Journal Competitions 304
Society Meetings 304

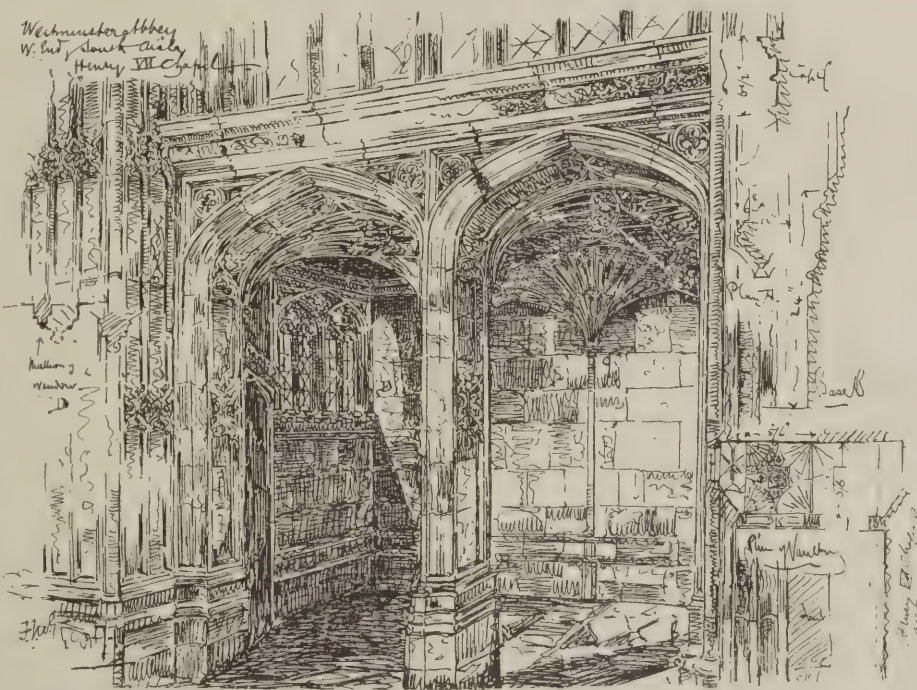
"Craftsmen." AN important, and a somewhat startling announcement is published in the last edition of the *Institute Journal*. It is nothing less than that a Special General Meeting will be held at the conclusion of the Ordinary General Meeting on Monday next, "To receive and consider a recommendation of the Council to establish under the provisions of the Charter a CLASS OF SUBSCRIBING MEMBERS to be called 'CRAFTSMEN,' and to make and adopt by-laws which shall define, regulate, and prescribe the conditions of membership and the mode of election and admission, and the privileges, obligations, and benefits of, and the payments to be made by the proposed new class." The most important clause of the by-laws, which the Council have prepared for recommendation to the meeting, is on the definition of a Craftsman. "Craftsmen shall be persons not professionally engaged in practice as Architects, who are working at any of the crafts connected with Architecture, and who have designed or executed such work or works as shall, in the opinion of the Council, promote the interests of Art." Never has the Royal Institute of British Architects done anything nobler than this attempt, tardy though it be, to recognise the affinity of the Craftsmen to what, in a concrete form, is known as Architecture. It is the breaking down of a barrier which was surreptitiously erected at a time when Art became debased and divorced from the affections of her foster brother, but every lover of the true and the beautiful, every earnest worker in what we ourselves have designated the "Glorious Art of Building" should join in this splendid proposal of the Institute, and carry it with unhesitating approval. It comes, this innovation, at a desperate moment in the history of Conduit Street. Is it just that the BUILDERS' JOURNAL should lay claim to a little of the propelling influence? We think it is. But whoever has propelled, and whose ever is the honour, the inactivity of the various successive Councils of the Institute was becoming a matter of the most momentous

character. It has come to an end. We now discover possibilities which we knew right well existed, but could not see. It would be ungenerous if we marred our approval of this measure by commenting upon what we hear was the chief motive of this advancement. It has been told us, and by men high in the Profession, that without the examination fees the Institute would almost go the wall. We do not believe it; neither do we believe that financial considerations have at all prompted this grand and startling admission of Craftsmen to the honours of connection with the Institute. It is only those who get about and hear, not at

ture worthy its greatest ambitions. There must be no failure now.

The New Council of the Institute.

The new constitution of the Institute Council and Committees, and the announcement, treated elsewhere, overshadows all else this week, unless it be that the festivities of the Association dinner come as a gallant relief to the density of Professional existence. What we had to say upon these elections may now remain unsaid, for the present, in face of the announcement that may change the whole aspect of affairs. At any rate, the new constitution must be given ample time to develop its intentions, if it has any, in advance of what has been accomplished. Mr. F. C. Penrose again becomes President—it would have been a hard task to have found a successor. It will be harder still next year unless our suggestion of a lengthened Presidency be entertained, which will sooner or later become an absolute necessity. In Mr. Aston Webb—the top of the Vice-Presidential poll—we have one of the most conscientious men in the Profession, whilst in Mr. James Brooks, the Gold Medalist, Mr. Ernest George, and Mr. Alexander Graham almost every phase of Architecture is represented in the same degree. That Mr. E. W. Mountford remains on the Council will give pleasure to many. In Mr. Paul Waterhouse, who evidently represents his father, to whom the Institute owes so much; in Mr. A. E. Street, one of the brightest of the younger School; and in Mr. Caroe, the new President of the Association and Architect to the Ecclesiastical Commissioners, we have three polished men of the World who bring University influences to bear upon the Council, even if their Architectural experience has had no startling development. Several other members of the Council, holding prescriptive rights in perpetuity to their positions, have but the thinnest connection with the modern practice of Architecture, but then they may be good men of business, clever and tactful and far seeing in their methods, able to bring



SOUTH AISLE, HENRY VII. CHAPEL AT WESTMINSTER: DRAWN BY F. T. W. GOLDSMITH.

key-holes forsooth, the murmurings of the winds of discord that have wrecked other Arts and other enterprises, who can honestly judge of matters which concern so deeply and so irrevocably the social prestige of the Architectural Profession. Some men brook no fear, nor see danger when it comes. We can affect the same fearlessness when it is wise, but there was danger lurking at the very doors of the Institute, which we trust has now been sent to the right about by the evidence of this action of its Council. But the admission of Craftsmen is only the foundation of improvement. It was the foundation that we wanted, and now we have got it, the Council should erect a superstruc-

Attention is directed to Several Important Announcements on Page 296.

experience to ballast the lighter but swifter craft that sail with them. We do not think that the Council's constitution is hopeful to the plaintive wail of Mr. Beresford Pite, that the Institute might do something to further the interests of Architecture as an Art. But, with this distinguished young Architect, we hope that renewed health and increased vigour may induce some artistic influence to bear upon its freshened existence. There is much it can do, and it should be up and doing.

The "Destruction" of Edinburgh.

CURIOSLY enough, while we have been dealing, in our current number, with the work of Mr. William Young, incidentally mentioning the Earl of Wemyss, that redoubtable Earl has been sounding a bugle blast in the columns of our Edinburgh contemporaries, and quoting the authority of Mr. William Young. Lord Wemyss has been aroused; Mr. Young aroused him and now he is endeavouring to arouse Edinburgh and to discover a Conscience and a love of Proportion in the hearts of Railway Directors. "Edinburgh," cries Mr. Young, "is about to be destroyed," and the Earl is losing no time in shouting this from the housetops. By the way, the ordinary housetops will no longer be of much avail if this monster hotel—which is the bone of conflict—for the North British Railway Company be allowed to dwarf the famous Carlton Hill and "destroy" the Modern Athens. Lord Wemyss, we are afraid, is a little late in the day. It is the age, unhappily, of Leviathan Hotels. "Views," "perspectives," "vistas"—all the happy things, the loss of which Lord Wemyss bemoans—must break or bow down before the caravansary and the corn elevator. In the soul of the North British there is no sentiment; and Lord Tweeddale spoke of "sanction" and "control," and the usual "safeguards." It is a pity Mr. Young's powerful note of criticism and of warning was not sounded earlier. We can hardly believe that the good people of Edinburgh, who love their city—a city which in a sense resembles the goose that lays the golden eggs—will allow it to be "destroyed." Even the North British is sufficiently interested in Edinburgh to prevent that. We are afraid that the hotel will soon look scornfully down on the doughty Earl, if by virtue of its sheer height alone. Dare we hope that that height will be mingled with a little dignity? The elevations we have seen convey a fretful and somewhat restless impression.

NEGOTIATIONS are practically completed for the acquisition of a site for the erection of a Sunday School and Lecture Hall in connection with the Lewes Congregationalists. The Tabernacle is a spacious building between the Goods Station and the river Bridge, and it is contemplated to acquire a portion of the works of the old Etna Foundry, in rear of the Chapel, and on this a commodious and useful block of buildings will be erected.

THE proposal of the Police Commissioners of Prestonpans, to accept a free site and about £900 from the Literary Institute Committee, for the erection of a Public Hall having been challenged by a petition signed by eleven householders, a test ballot was taken. Fifty voted for the erection of the Hall and 38 against. The Hall will seat about 600, and the cost is estimated at about £1,390.

THE United Operative Plumbers' Association of Great Britain and Ireland, recently held a special meeting at the Daulby Hall, Daulby Street, Liverpool, with reference to the plumbers' registration movement. Delegates were present, sent by operative plumbers' Societies from all parts of the kingdom. The following resolution was carried unanimously: "That this meeting of delegates of the United Operative Plumbers' Association of Great Britain and Ireland is agreed that the scheme of registration of qualified Plumbers is worthy of the support of plumbers, and instructs the Executive Committee to support and extend the scheme."

FUNDS are being raised to repair the Church of St. George-the-Martyr, Southwark. The cost is estimated at £3,000.

THE NORMAN CHAPTER HOUSE AT DURHAM.

RESTORATION AND RE-OPENING.

THE Chapter House of Durham Cathedral, restored as the final and the more important part of the Public Memorial to the late Bishop Lightfoot, was opened on Thursday last. The work, which has been of an extensive character, has occupied several years in completion, and its progress has been watched with considerable interest; whilst, though opinions, especially amongst archaeologists, may be divided as to the fidelity with which the ancient building has been copied in the restoration, they will agree that the work is one most appropriate in its fitness to the memory it is intended to perpetuate. It is not certain by whom the original Chapter House was built, but most authorities agree in giving Bishop Rufus as its founder about the middle of the twelfth century. It seems at least certain that it was completed under his regime, though said to have been subsequently vaulted and embellished by Bishop Skirlaw, and that it was agreed to be one of the finest specimens of Norman Architecture in the Kingdom. According to some authorities it was without a rival. It was of spacious dimensions, and measured from 75 to 80 feet in length, and about 35 in breadth, with an apsidal termination at the east end. It was built in the form of a theatre, vaulted with stone, without any pillars, the side walls being ornamented with pilasters and intersecting arches. It was lighted with five windows at the semi-circular east end, with two side lights and a window to the west. The vaulting over the Apse was singularly beautiful and cleverly done. The groins of the vault sprang from corbels supported by human figures in the manner Atlas is usually represented, the mouldings of the ribs being cut with a zig-zag figure. Below this, an arcade of semi-circular headed and intersecting arches ran round the building, except at the west end. Three rows of stone benches, one above the other, ran round the building, and on the top-most of these the monks sat whilst in chapter. In the centre of the east wall was a stone chair, with much carved work, which was the Bishop's seat when he "visited" the Cathedral, and wherein the bishop's of the see have been installed from the earliest times up to the installation of Bishop Barrington in 1791. Close to this seat was a wooden chair, fastened to the wall, and used formerly by the priors and subsequently by the deans when the bishops held their visitations at the Cathedral. The doorway was at the west end and opened into the Cloisters. On the inside, according to Dr. Greenwell's pamphlet on Durham Cathedral, "it remains tolerably complete but somewhat defaced by incorrect restorations in plaster. It is richly moulded and decorated with patterns characteristic of the early part of the twelfth century." The Chapter House was not only the place of installation for the bishops, it was very frequently their place of sepulture, and the floor was at one time covered with the monumental slabs of some of the most famous occupants of the see. To the south of the Chapter House was a Prison for recalcitrant monks, and at the east end of the Chapter House was a yard called the centry garth where the priors and monks were buried. The Chapter House remained in such condition until 1795. It is recorded that on November 20th of that year, at a meeting of the Dean and Chapter, it was ordered that the Chapter House being pronounced by Mr. Wyatt to be in a ruinous state be taken down, and that a new room be erected on the same site. Fortunately, correct plans of the building were in existence, having been executed by John Carter, an Architectural draughtsman, and from these a perfect idea can be obtained as to the appearance of the Old Chapter House. In 1796, the Chapter House was almost entirely demolished, and the general reason given by archaeologists for this proceeding is that the then Chapter desired a more comfortable room in which to transact their business. Be that as it may, the handsome east end, with its moulding, was pulled down and the room was much shortened by the erection of a lath and plaster wall with

three large windows. In this condition it remained almost a century, and doubtless would have gone on so, but for the decision of the Lightfoot Memorial Committee, under whose directions it has been restored to its former size and appearance. The present Chapter House is on the site of, and of the dimensions of, the Norman Chapter House erected in the twelfth century. To restore it to its original condition, as has been done, everything had to be new except the western portion of the walls. As restored, the Chapter House is an oblong room with a semi-circular Apse at the east end, the length, including the Apse, being 77 feet, the breadth 36 feet, and the height, to the crown of the vaulting, 44 feet. The building opens into the Cloisters by a great archway in the centre of the west end, which was open during the whole Monastic period, but after the dissolution of the Monastery and the consequent alteration in the use of the Chapter House, doors were hung in it. The crooks belonging to these doors were found, and have been used to hang the new carved oak doors on. On each side of this archway is a window opening, which would also have been open during the Monastic period, but would be closed at the dissolution. Above these openings is a large west window of five lights of the late Decorated period; and, besides this, the building is lighted with seven new windows of Norman character, enriched with zigzag ornament, running round the Apse and the adjacent walls. A stone bench and two steps run round the building, where remains found "in situ" showed them to have been; and the lower part of the wall is ornamented by an interlacing arcade and strings above and below it. The stone vaulted roof is carried on corbels that have been carved in imitation of the old ones, saved from the destruction of 1796, and preserved in the Chapter Library. Above the stone vaulting is a substantial timber roof of low pitch, covered with lead. The clearing away of the thick bed of rubbish, with the sleeper walls built in 1796, that so long had covered the floor of the western part of the building, has brought to light several very interesting grave slabs of the early bishops, and the removal of a portion of foundation wall, when the building was entirely completed, most fortunately brought to light the greater part of the ancient stone chair of the bishops, which, after lying buried for a period of close on 100 years, will now again be used for its original purpose. The building is heated by one of Grundy's patent hot air apparatus. The works have been from the designs and under the superintendence of Mr. C. Hodgson Fowler, F.S.A., Cathedral Architect. The total cost of the restoration of the Chapter House has been £5,537, and this, added to £1,473, the cost of the handsome marble Cenotaph erected in the Choir of the Cathedral, and unveiled in October 1892, brings up the total expenditure in connection with the Memorial to £7,011.

THE pinnacles of Greyfriars' Church Steeple, Dumfries, which were susceptible to injury by storm, are to be removed, and the positions they occupy are being finished off according to a plan prepared by the Burgh Surveyor. The Architect of the Church, having written suggesting a different mode of finishing off the vacant places, the Town Council decided, on the recommendation of a committee, not to interfere, the work having been let.

NEW Municipal Buildings which have been erected at Bath, at an outlay of £32,000, and form the South Wing of the Guildhall, a similar Wing on the north being devoted to Technical Schools, were opened on Wednesday last, when the Town Council took possession of its spacious new Chamber. This has a beautifully moulded ceiling, springing from marble pillars. In addition to the Council Chamber the Wing contains handsome offices for the various public officials, a new Court and necessary rooms, &c.

THE proposed new Bridge over the Medway, between Rochester and Snodland, will probably cross the river between Woudham and Halling. The Bridge will be a high level one, with approaches rising from each shore, and will cross the river in one span. The plans show a handsome Bridge, built on the cantilever principle, and the cost is estimated at £28,925.

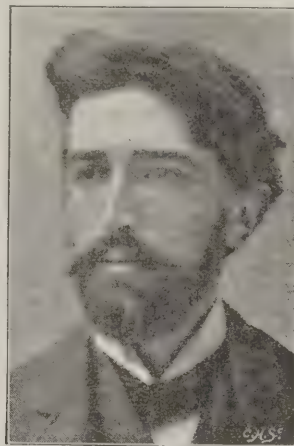
THE ARCHITECTURAL ASSOCIATION.



J. BEGG.



THEO. MOORE.



A. BERESFORD PITE.



FRANCIS HOOPER.



F. T. W. GOLDSMITH.
Vice-President.



G. H. FELLOWES-PRYNNE.
Vice-President.



E. W. MOUNTFORD.
Ex-President.



W. D. CAROE, M.A., F.S.A.
The President



HAMPDEN W. PRATT.
Hon. Treasurer.



ALFRED H. HART.
Hon. Secretary.



W. H. SETH SMITH.



OWEN FLEMING.



BANISTER F. FLETCHER.
Hon. Secretary.

THE PRESIDENT, VICE-PRESIDENTS, HON. TREASURER, HON. SECRETARIES AND PRINCIPAL MEMBERS OF THE COMMITTEE.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
June 18th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE new Municipal Buildings at Bath, of which Mr. J. M. Brydon is the Architect, were opened on Tuesday last. The feature of the new buildings, which form the South Wing of the Guildhall, is a handsome Council Chamber, which in proportion, decoration and fitting, is a great contrast to the old chamber in the Guildhall. A new Sessions Court is another feature, and a third is a Mayor's Parlour. There are numerous rooms for officials, committees, and persons having business at the sessions, many of whom were totally unprovided for in the Guildhall. The electric light is used throughout. The total cost will be about £32,000. A part of the scheme is the erection of Technical Schools in harmony with the present style of Architecture, to form the North Wing of the Guildhall, but this is yet far from completion.

HAND-WROUGHT silver is deservedly popular among those who can distinguish its merits from the insipidity of machine work. The individual characteristics of the artist and of the workman find ready expression in decorating the metal in line and in relief. Mr. Gilbert Marks (a relative of Fred. Walker and of Stacy Marks), as a trained artist, has done well to bring together a small number of silver plates, dishes, and vases worked from his designs, and often by his hand; and his work is now on view in London. There is no imitation of old patterns, no copying of Renaissance work. The artist chooses his designs, mostly floral in form, and works them partly from the reverse and partly from the front on hammered grounds, the natural colour of the silver being wisely allowed to speak for itself. The pattern traced is slight, and the least possible amount of decoration is used to relieve the plain hammered surface. The relief or *repoussé* work is usually from the flowers of an herbaceous garden, anemones or fritillaries; only one piece approached to a geometric pattern, the instance in question being one that represented a great deal of detailed work. Another piece had some suggestion of sixteenth-century Spanish design; one a suspicion of Venetian pattern. One of the best was a tall, narrow goblet on a pedestal, in which the artist had shown his most original sense of design, and this piece forms the most pleasing and successful example of his work. Two large plates, with deep centres and wide edges, also deserved attention for the lightness and grace of the decoration on the hammered and otherwise plain surface.

THE new Parish Church of Crathie, N.B., is opened to-day. Built of white granite, on a site nearly opposite Balmoral Castle, the pretty little edifice forms an interesting landmark in the district. The Church is of the early Scottish style of Architecture, the square Tower rising above the intersection of Nave and Transepts, and resting upon arches springing from four handsome granite pillars. The South Transept will be set apart for Her Majesty and those of the Royal Household who attend worship in the Church. Among numerous interesting gifts to the new building are a stained glass window from the Queen, com-

memorative of different members of the Royal Family; a granite Pulpit from the Royal Household (inlaid with a fine variety of Scotch pebbles, collected by Princess Louise in the Island of Iona); a granite Baptismal Font from the Duke and Duchess of Connaught; and a peal of four bells, two from Princess Louise and two from Princess Beatrice.

MR. ALBERT BRUCE-JOY, the Sculptor, who did the Matthew Arnold Memorial in Westminster Abbey, is making a very bold experiment. Though he is, perhaps, the first Memorial Sculptor in England, he is not satisfied with this, but intends to go to Paris for a year, to study once more in the ateliers of French Sculptors preparatory to resuming imaginative subjects for his own chisel.

THE Glasgow School of Art having been invited to contribute an exhibit of Students' work to an Arts and Crafts Exhibition organised by the city of Liege, Belgium, three cases of selected works, consisting entirely of Designs for Textiles, Needlework, Wall Papers, Metal Work, and Pottery, together with actual work in Stained Glass, Metal Work, and Printed Posters; also Architectural Designs, Modelling, and Decorative Painting were forwarded. The following letter from the President of the Committee has been received by the School:—"L'Œuvre Artistique, Liege. To the School of Art, Glasgow. Our Exhibition has been opened for about a fortnight, and the exhibit you sent us has been very much admired by everybody. It is with the greatest pleasure that in name of a certain number of Artists, friends of mine, as well as in my own name, I thank you for what you have sent us, and congratulate you very sincerely upon its worth. Our Schools of Art are far, very far indeed, from being so advanced as yours, and what has above all astonished us in your work is the great liberty left to the pupils to follow their own individuality. Such is so different from the ideas current in our Schools of Art that it is difficult for us to comprehend this freedom, although we admire it very much. I think the exhibition of the works of your Students cannot but cause serious thought and reflection to those here who direct Art instruction.—G. SURREIERER."

A LOUIS SEIZE piano, made by Broadwood to the order of a private lady, was recently inspected by a number of artists and musicians. It has occupied two years in construction, and the whole work has been executed in Messrs. Broadwood's own factory. The piano is a semi-concert grand in size, and the case and stand strongly resemble the Louis XVI. work tables and armoires which are now so valued. The lid is of mosaic in kingwood, with medallions containing trophies of musical instruments in marquetry, while the sides are inlaid with diaper pattern, ornamented with musical and floral trophies, framed with ormolu and rosewood mouldings. The marquetry is made up of foreign woods of natural colour, mingled with woods stained with different tints, while from the principal moulding are hung ormolu festoons of roses, tied with the Louis XVI. bow. The music desk is a delicate floral marquetry depicting field flowers and butterflies, while the candle-boards are of dark rosewood, bordered with tulip and lines of various woods.

THE directors of the National Museum of Antiquities, Edinburgh, have forwarded £7 10s. to Mr. James Reid, a workman at Langholm, as purchase-money for an ornamented hinge or hasp, picked up several weeks since near the parish burying ground, about a quarter of a mile outside the town. The place where the article was found, in the cleft of a rock, is on the site of Wauchope Castle, the cradle of the great Scottish family of Lindsay. Nothing of the Castle now remains, and the hinge is supposed to be several hundred years old. It had probably been fixed on a valuable chest, as it is richly ornamented. It is made of brass and beautifully gilt, the gilding being almost as fresh as the day it was put on. There are four snakes' heads on the hinge, which have been beautifully enamelled. Mr. Burnet, Architect to the Duke of Buccleuch, was instrumental in bringing the find to the notice of the Museum.

THERE is some talk in Berlin of celebrating a somewhat singular centenary—that of the origin of numbering houses. According to a German contemporary, this convenient method of indication was quite unknown, even in London or Paris, until a century ago. In 1795 the practice of numbering private houses was begun in Berlin. The method employed, however, was then exceedingly imperfect. The Brandenburg Gate was taken as the point of departure, and the numbers went on successively throughout the whole town, without any distinction as regards streets. Even to-day the system of numbering generally employed in the German capital leaves much to be desired, as the numbers run consecutively up one side of the street and back again on the other. Vienna claims the honour of having inaugurated, in 1803, the method of placing the odd numbers on one side of the street and the even ones on the other.

THE Boundary Street scheme of the London County Council is developing, and a large part of the land from which the slums have been swept is now under active building operation, the small first section having been finished. The part now in hand is much larger, and no less than eight blocks of building are getting their foundations. Some of these sub-structures are complete, and are ready for the houses to go up upon them. The original intention was to carry out the whole of this work through the Council's own Works Department, but, owing to differences of estimates on the part of the Architect's Office and the Works, this arrangement seems likely to break down.

ST. BARTHOLOMEW THE GREAT, the restored Crypt of which the Bishop of Stepney will dedicate on the 29th inst., is the oldest Church in London. There is a curious legend concerning its foundation. When Rahere, the King's minstrel, was journeying to Rome in 1120 in expiation of his sins, he dreamed that he was carried by a great monster to the brink of the bottomless pit. St. Bartholomew came and rescued him, and commanded him to build a Church. On his return home Rahere carried out the command, and St. Bartholomew the Great is the result. The Church was completed in 1133. Among the old registers in the Vestry is an entry of the Baptism of Hogarth the painter.

THE fine Bridge over Dean Street, Newcastle, now opened for traffic, adjoins the present arch, which was built nearly fifty years since. The new structure has been examined by Lieut.-Col. H. A. Yorke, R.E., of the Board of Trade. It bears two lines of rails, thus making four lines between the Central Railway Station and Heaton. The span of the old arch is 80 feet, while that of the new one is 106 feet. The new structure is of grey granite, of which there is 70,000 cubic feet; besides over 100,000 feet of dressed ashlar. The bridge was designed by Mr. Charles A. Harrison, the Company's Engineer, and the work carried out by Messrs. Walter Scott & Co., within two years.

IMPRESSIONISM is the keynote of the new Exhibition at the Egyptian Hall, under the auspices of the Dudley Gallery Art Society. The show contains good workmanship and careful drawing, while there are nearly eighty more pictures than usual. The president (Mr. Walter Severn) has contributed six water-colours, of which "Mentone, from the East Bay," is the most prominent. "When Wave Meets Wave" is a fine sea piece from the brush of Mr. E. J. Duval; while the soft evening light which Mr. Fred Dixey has portrayed in "A Flood on the River, from Richmond Hill," is as effective as any landscape in the Gallery. Mr. R. A. K. Marshall's "Eventide, near Rodborough, Gloucestershire," shows a picturesque prospect, seen through a leafy screen of trees in the foreground. Mr. B. J. M. Donne has contributed a powerful piece of work in "Notre Dame de Guerison, Courmayeur," in which the snowclad peaks disappear in the misty atmosphere. There are not many figure paintings.

MR. BERTRAM MACKENNAL, who has a noteworthy group in the R. A. Sculpture Room this year, and has been described as the founder of a new "School," hails from the Antipodes,

and is still under 30. He is the son of a Sculptor, and early shewed his abilities. He was allowed to travel, and visit England, France and Italy, studying Art in the capitals of each country. When only 24 he was commissioned to decorate the Houses of Parliament in Melbourne, and since this commission, which brought him fame in Australia, he has managed to build up a reputation.

ON Friday the new Clerkenwell Town Hall, which occupies the greater part of a triangular plot of ground bounded on one side by Rosoman Street, on another side by Garnault Place, and on the third by Rosebery Avenue, was opened by Lord Rosebery. The structure is of red brick, with white Ancaster stone dressings, prominent among its embellishments being the emblematic badge of the Knights of St. John of Jerusalem, carved in red brick. It is an addition to the public buildings of a district of London not by any means overdone with the ornamental, and presents a contrast to the old Vestry Hall, which shares with it the triangular plot of ground. On the ground floor the Medical Officer, the Surveyor, the Vestry Clerk, and the various clerks constituting the subordinate staff have offices. There are two excellent Committee Rooms also. The whole of this ground floor is, in fact, devoted to administrative purposes. The Corridors are floored with mosaic, the walls are tastefully embellished with ornamental tiling, and there are some handsome dwarf columns of Devonshire marble at the foot of a staircase up to the first-floor, the main features of which are a really beautiful Public Hall and Council Chamber. The Hall is 66 feet long 44 feet 6 inches wide, and 38 feet from floor to ceiling. It is tastefully adorned with Cathedral glass windows in harmony with the colouring of the interior, while a series of winged figures round the walls hold out clusters of electric light. The place is also fitted up with sun burners and gas brackets. The Council Chamber is smaller, but equally handsome. It is 48 feet long, by 29 feet wide, and 22 feet high. At one end of it is a Public Gallery. A special feature of the arrangement of this first floor is a broad and handsome Corridor running down the side of the Great Hall, constituting a Promenade from which the Hall opens. From these public portions of the floor the Council Chamber is divided by a transverse Corridor, at one end of which the Open Balcony over the Main Entrance affords an extensive view over Rosebery Avenue for a long distance right and left. This floor also comprises Cloak Rooms and other Offices, together with a Retiring Room adjacent to the platform that occupies one end of the Great Public Hall. This will be for speakers, or artists engaged in public entertainments of any kind. Staircases lead up to the floor above, and there is a small third floor, which will be taken possession of by the Public Analyst. The Architect is Mr. Evans Vaughan, F.R.I.B.A., and he has been represented on the building by Mr. W. Gannaway as Clerk of the Works. The builders are Messrs. Dearing and Son, of Islington.

THE Northampton Institute in Clerkenwell, designed by Mr. Mountford, is making rapid advance, though it may be another year or a year and a half before it will be fit for occupation. Mr. Mountford was the Architect of the Battersea Polytechnic, and he has brought to

bear on this building the experience gained at Battersea. There will be a fine Assembly Hall, a large Gymnasium, and an extensive range of Technical Workshops and Laboratories, as well as a good Swimming Bath. The expenditure on this building will be £70,000.

WHILE excavating at Carnarvon, a number of men came across a large cavity which appears to be a Roman well. Upon removing a stone slab which lay on the surface, a good-sized shaft was found. It is of oval shape, being seven feet by six, and at a depth of eighteen inches from the top it is sunk in solid rock to a depth of nearly thirteen feet. There is at present five feet of clear spring water in it. The spot where the well was discovered being adjacent to, if not on, the site of old Segontium, there is little doubt that the well may be added to the large number of interesting Roman remains disinterred at Carnarvon within recent years.

THE new Country Homes for the children of Mile End, which are proposed to be erected at North Weald, Essex, constitute the largest venture of the kind in London, or, indeed, in the country, the estimated expenditure ranging from £60,000 to £80,000. The plans, prepared by Mr. Burdon,



ABERLADY CHURCH, N.B. : WILLIAM YOUNG, ARCHITECT.

the Board's Architect, are for the housing and accommodation of 400 children. It is proposed that there shall be eight Cottages, for 160 boys, between the ages of seven and 16, each Cottage being arranged to accommodate 20 boys, in charge of a foster father and mother; 16 Cottages for 240 girls and infants, arranged for 15 in each, in charge of a foster mother; Probationary Home for 15 of each sex, in charge of a foster father and mother, who are to act as porter and portress and gardener; Superintendent's House, with Board Room attached; Schools for 160 children of each sex, with a separate Infants' Department to accommodate 100. These buildings are planned with a view to future extension. In addition there is to be a Hall to accommodate 600 children and adults, to be used for services and entertainments; Infirmary to accommodate 20 children of each sex, with requisite Offices, also planned with an idea to future extension; Isolation Infirmary for children of both sexes; Visiting Halls, Swimming Bath and Gymnasium, Village Shop and General Stores, Bakehouses, Bread and Flour Stores, Training Shop for carpenters, engineers, smiths, painters, glaziers, shoemakers, tailors, &c., Board Room, Laundry, Dynamo Room and Accumulators—it being proposed to light the village by electricity—Boiler-House, Water Tower and Power, Sewage Farm, &c. The roads will be so arranged that the Cottages form a half circle,

400 ft. apart, with the administrative blocks in centre, and facing a large ornamental lake and grounds.

A PAINTER in financial difficulties two years ago pawned his Gallery of Old Masters to an Art dealer in Vienna who lent him 55,000 florins at nine per cent. interest. In January the Artist ought to have repaid the loan and taken back his pictures, and as he was unable to do so the Art dealer had the pictures valued, intending to sell them by auction. Art connoisseurs have repeatedly declared the 70 old masters to be worth 200,000 florins, but the experts employed by the dealer put down their total value as 4,875 florins. The following are some of the items of their list; it is to be remembered that they did not express any doubt as to the genuineness of any of the pictures; A Titian, "The Annunciation," 200 florins; Murillo, "Adoration of Jesus," 20 florins; a Leonardo da Vinci, 100 florins; Paul Veronese, "Jesus and the Woman of Samaria," 150; Salvator Rosa, a landscape, 100. The list contains a large number of pictures of the Dutch School, put down at 10 and 15 florins each. The Painter appealed to the Court against this estimate, which has been declared utterly worthless.

THE Porch of the Scottish National Portrait Gallery has now been completed by the addition of Statues of Wallace and Bruce, which fill the lower niches on each side of the doorway. Wallace, who stands on the east side, is in the simple chain armour worn at the period. Over it is a long surcoat, tied at the waist with a long narrow strap, while the richly decorated sword-belt comes diagonally across the body with good effect. The face, which peers through the opening of the mail, wears a thoughtful look, and the overwhelming nature of the task in which Wallace was engaged is further represented by a slight curve of the shoulders, as if pressed down by a

load of care. The left hand rests on a long pointed shield. On it is emblazoned a lion rampant. The right grasps the hilt of his great sword with naked blade, to indicate that he died while his work was in progress. The Bruce, on the other side, appears with a more kingly air. He, too, is in chain mail, with short leather surcoat, on which the Scottish Lion is figured, and he wears an over cloak clasped at the neck with a brooch. On his head is an open conical helmet with the Royal circlet round it; on his knees and on the front of his legs are pieces of plate armour. Designed and executed by Mr. Birnie Rhind, A.R.S.A., the figures are exceedingly decorative.

MR. THOMAS REAY, Architect, of Newcastle, recently brought an action against the Churchwardens of St. John's Church, Low Fell, in which he claimed £45 for professional services regarding a proposed Parochial Hall and Sunday School-room. The dispute arose over differences of plans and estimates, a lower estimate than that upon which plaintiff's work had been based having been resorted to by the Churchwardens and Committee, and upon which they estimated they should be called upon to pay. After a number of professional and other witnesses had been called, the Judge gave judgment for Mr. Reay for the full amount claimed and costs, and in doing so he characterised certain remarks in correspondence as a

gross insinuation without justification upon Mr. Reay's character. He thought that Mr. Hooper (the Vicar) should have realised that a man was worthy of his hire.

ARTISTS are rapidly being driven away from St. John's Wood by the Manchester, Sheffield, and Lincolnshire Railway. Landseer's house, more recently occupied by Mr. H. W. B. Davis, R.A., has disappeared, and on its site huge model dwellings for five thousand of the working classes, who will be dispossessed by other demolitions, are being built. Edwin Long's Studio, half a mile further off, is half down, as a shaft for a tunnel has been arranged upon its site, and Mr. Robert Macbeth, its present tenant, has had to leave.

THE Reading Town Council has decided to vote a sum not exceeding £8,000 for building an Art Gallery for the town and extending the present Free Library and Museum buildings. A site for the Art Gallery has been secured by purchasing some houses adjoining the Free Library. These will be cleared away to make room for the handsome block of buildings it is proposed to erect. The plans have already been approved, and tenders will be advertised for forthwith for the execution of the work. The tenders will be confined to local builders.

THE transferring of the pictures from the National Portrait Gallery in Great George Street, Westminster, to the handsome new buildings at Charing Cross has already commenced, and the formal opening ceremony is expected to take place about the middle of November, by which time the bulk of the pictures will have been rehung. No arrangements have yet been made for the inaugural ceremony, but whatever proposals are made will of course be first submitted by the Trustees for her Majesty's approval.

AN Art Department has been provided at the Yorkshire College by the Clothworkers' Company at a cost of about £3,000. The room hitherto occupied by the Art Class will now be set apart as a Museum connected with the Textile Department. Ever since the establishment of the latter Department it has been intended to form a Museum, which shall contain a complete collection of specimens of woven samples and models of weaving machinery. In connection with some of the more important centres of the Continent, such as those at Aachen and Lyons, Textile Museums have for some time been in existence, but it is not proposed to take either of those as typical of what is required at the Yorkshire College. It is proposed to commence with such specimens and models as will be instructive and helpful to those employed in the weaving trades of the district.

THE Edinburgh Town Council has just had published an exhaustive account of the history of the City Municipal Buildings for the past 700 years, the work having been carefully compiled from the original records by Lord Dean, of Guild Miller. The most interesting bit in the volume, perhaps, is the history of Parliament House. Certain details in the book show that Edinburgh has had to pay a heavy pecuniary penalty for the honour of being the Scottish capital. The work contains several illustrations and plans.

SCOTLAND has done her fair share in the æsthetic as well as in the practical life of Britain, and she has initiated or developed more than one movement in Art during this century and the last. We have had a Scottish Exhibition lately at the Grafton Gallery, but it dealt almost entirely with the Art of an earlier age. The present departure of Scotland in the Art of Painting is of the first interest and magnitude. The more intelligent and dignified of the modern Scottish painters have produced work not unworthy of any School, and even the wilder and worse trained men, in their most extravagant Decorative decadence, deserve regard for their constant courage and enthusiasm. Therefore a really representative Exhibition of the young Scottish School would be indeed worth careful examination. Although it contains a variety of work and a few good canvases, we cannot call the Exhibition at the

Continental Gallery a really characteristic exposition of contemporary Art in Scotland.

THAT qualification could never be applied to a catalogue which omits the names of Melville, Guthrie, Lavery, Walton, Roche, Paterson, Macaulay Stevenson, and more, indeed. Moreover, figure pictures and portraits are few and second rate. The style of portraiture practised with so much dignity by Mr. E. A. Walton and others, is here somewhat weakly shown by Mr. Patrick Orr, while Mr. A. C. Holms is not so much Scotch as a poor adherent of Sir Edward Burne-Jones. Of the richly coloured mosaic in square touches which is the decorative formula of the Scotch School, there is only one example, "An Autumn Glade," by Mr. J. T. Kelly. Amongst the better canvases we noted work by Messrs. R. B. Nisbet, T. Robertson, A. Kay, Sherwood Calvert, A. K. Brown, G. Smith, R. C. Crawford, D. Fulton, R. G. Hutchison, and J. M. Henderson. Good work by other men, however, may be picked out, although a great part of the Gallery is so badly lit that one cannot be sure of the quality of many of the pictures.

A CORRESPONDENT writes: The famous collection of originals of Sir Godfrey Kneller's Portraits of members of the Kit-Cat Club are happily intact. The Painter, it will be remembered, was "limner" to the Kit-Cat Club; each member paid for his portrait, and the pictures hung in the "Club," which was held at the house of old Jacob Tonson, one of "the fathers of the bookselling trade." It is averred the Club was founded with other motives than mere conviviality, the principles of the Revolution of 1688, in the accomplishment of which most of the foundation members were actively concerned, being the foremost bond of their unity. The Gallery of Portraits remained in possession of the Tonson family; Jacob's son installed the collection at Barn Elms, and hence they have gravitated to the possession of Mr. W. R. Baker, of Bayfordbury Park, Hertford, through marriage with the descendant and heirress of the Tonsons. The collection is there treasured in its integrity; one portrait, that of the Duke of Marlborough, has always been missing; it was inferred that the great Jack Churchill had retained possession of his particular picture. The sketches for many of these Kit-Cat portraits, drawn by Kneller in chalk, are to be found in a collection at Hampstead, next door to the very mansion which formed the summer club-house of the "Kit-Cats," "The Upper Flask," situated "at Hampstead's breezy heights."

THE statement that an explosion which occurred in the Johann Colliery at Karwin, and by which ten men were seriously injured, was due to a miner accidentally breaking the glass of an electric lamp with his pick, is of great importance. It may be assumed that an incandescent lamp is meant, and it has always hitherto been argued that in the event of an electric lamp being broken no danger would ensue, inasmuch as the carbon filament would be instantaneously volatilised, and the lamp would be extinguished.

AT the annual Conversazione of the Royal Society held at Burlington House on Wednesday evening, the rooms contained an exhibition of great interest. The curator of the Maidstone Museum exhibited nine extremely interesting photographs, together with a map, ground plan, and section, of a Roman Temple, discovered on the east bank of the Meadway, at Wouldham near Maidstone. The Temple was accidentally found by workmen who were engaged in removing sand for ballast, and was excavated under the personal supervision of the exhibitor. So far this Temple is the only one found south of the river Tyne. Mr. Francis Galton, F.R.S., showed a curious experiment in magnifying fingerprints. The system claims to be of great use in cases of identification, and though it has not been tried often in England, it is said to be widely employed in India. Some most interesting instances of Japanese painting, ranging from the early part of the fourteenth to the beginning of the nineteenth century, were exhibited by Mr. Gowland, who selected the pictures to illustrate the effects of time upon the pigments employed by the old Japanese Painters.

MR. EDWIN ABBEY has just returned from America, where he has been to set up, in the Boston Library, the cartoons which he showed in London in the winter. He has still some ninety linear feet of wall space to cover, and Mr. Sargent has even a greater amount, whilst Mr. Whistler has not as yet completed any part of his portion. Meanwhile the work of another of the invited artists, M. Puvis de Chavannes, is on view in the Paris Salon, and the Trustees have given out that they have expended as much of the City of Boston's money as they can do on this portion of their trust, and that the City funds must in future be spent on filling the shelves.

AT the Executive Committee of the Association for the Promotion of Art and Music in the City of Glasgow, a report from the Architects was submitted, showing that the basement floor of the new Art Galleries, at present in course of erection in Kelvingrove Park, will be finished in about a month, and that the work done up to the present time has been thoroughly well executed. It was decided by the Committee to advertise for tenders for the superstructure and completion of the building.

AN interesting Mansion that has just changed hands is "The Old House" at Blandford, Dorset. It is especially interesting to antiquaries, having been erected about the year 1660 by the celebrated German physician, Dr. Sagittary, and from its being the only house left standing after the great fire at Blandford in 1731, when the destruction of the bobbins put an end to the lace trade for which the town was then noted. The construction is wholly of red brick, the walls and chimneys being profusely decorated with projecting blockings, rich mouldings, strings and architraves cut and rubbed with great labour when built up or "in situ," and not, as is commonly supposed, of bricks or work moulded before burning.

DR. JOHNSON'S Monument in the Market Square, Lichfield, is falling into decay, and regret is also not unnaturally expressed that Dr. Johnson's birthplace is unoccupied and not kept in adequate repair. A namesake of the great lexicographer rescued the house from the hands of despoilers some years ago, and it is a pity that it is not put to some useful purpose. The owner is willing to let it rent free to any suitable Society permanently established. The Lichfield Town Council has granted the requisite funds for the repair of the Monument, and for a tablet to be placed on the house recording the fact that it was Dr. Johnson's birthplace.

Two important Provincial Exhibitions have just been opened, the Royal Cambrian Academy and the Loan Collection at the Public Art Gallery, Wolverhampton. In the first the best known works are Mr. Anderson Hague's "Flowing Stream" and "A Sailor's Home," Mr. Robert Fowler's "Sea Fairies," Mr. Joseph Knight's water-colours, a landscape by Mr. H. Clarence Whaite, and "Thorns and Roses" by Mr. Sheridan Knowles. In the second there are examples of Jan Steen, Verboeckhoven, G. Poussin, Sir Peter Lely, Copley Fielding, George Cole, J. L. Herring, Sir Charles Eastlake, and many others. This Gallery has recently received a large number of important works from the Richards' Collection, which is now the property of the town of Wolverhampton.

A MEETING of the Committee and members of the London Library has been held, to consider the proposal to enlarge the building, which is found to be inadequate for the constantly increasing number of books. There are now 2,275 members of the library, which contains 168,000 volumes. The lease of some adjoining property having been secured, it is proposed to rebuild the premises, so as to afford spaces for all the additions to the Library which are likely to be made within the next thirty years. The following resolution, after discussion, was carried: "That as the Committee has, upon the advice of a competent Architect, recommended that a scheme of reconstruction of the Society's premises at an estimated cost of about £17,000 be adopted, provided that a sum of £5,000 at least be first

obtained by means of donations, this meeting authorises the Committee (with that proviso) to carry the scheme into effect."

ARRANGEMENTS are, we understand, now almost complete for the purchase of the property in Palace Yard required for the proposed addition to Westminster Abbey. The negotiations have been successfully carried through in the case of every house save one, and it has been agreed to refer the question of the amount to be paid for that to arbitration. With the property thus practically under its control, the Office of Works is in a position to proceed to the clearance of the site almost immediately, but the work will probably be deferred until the winter, in pursuance of the policy now followed in Government Departments of postponing the execution of projects of this kind until the period of the year when labour is in least demand. As soon as the houses have been pulled down the ground will be levelled and turfed, and left in that condition until the all-important question of the acceptance of Mr. Yates Thompson's offer to bear the cost of the erection of an Annexe to the Abbey has been decided.

THE first portion of the work of reconstructing Moorgate Street Station has been completed, and the next section of it is well in hand. The renewal was begun in the early part of last year, and the whole of the original ramshackle sheds covering the lines and platforms have been swept away and replaced by new ones. So far as the platform level is concerned, Moorgate Street Station is now modelled on the best type. Considerable advance has been made with the rebuilding of the Station Front. The old wooden building of the Metropolitan line still remains intact, but a clearance has been made at the other end of the Station, and a handsome new Portland stone Frontage has risen to the height of a fine central Archway, forming an entrance down to the platforms of the "foreign lines"—that is to say, the Great Northern, Midland, Great Western, and Chatham and Dover—having running powers over the Metropolitan.

THE annual Exhibition of the Home Arts and Industries' Association opened on Thursday last at the Royal Albert Hall, and remained open until yesterday. Founded in 1884, the Society was formed to teach the working classes such minor Arts as wood carving, inlaying, metal repoussé, basket making, leather-work, &c., and this is done by means of voluntary instruction given at the homes of the teachers or in rooms provided for the purpose in local districts. Commencing with forty classes, the useful work of the Association has spread over England, Ireland, Scotland and Wales, and it is a matter of great congratulation to be able to record that 500 classes are at work. The chief aims of the Association are to train the eyes and fingers of its pupils so as to increase their value as workmen, to fill up the idle hours of lads and girls, to promote pleasant and sympathetic inter-

course between the educated and the poor, and to revive old handicrafts which once flourished in England. While these may perhaps be termed aims common to many kindred societies, this particular Association differs from other existing organisations in the voluntary and informal nature of its work. Its object is educational and not commercial, and it assists isolated workers in remote and poor districts, where neither pupils nor teachers could conform to the regulations enforced by other agencies. Last year Mr. Watts, R.A., and Mrs. Watts started what is known as the "Watts Endowment Fund," Mr. Watts himself contributing £1,000: but it is hinted that subscribers do not increase in the same proportion as the classes, and that the more active the Association becomes the poorer it grows.

THE Exhibition, which was held in the top Gallery of the Albert Hall, consisted of a collection of miscellaneous articles, made wholly or in part by the pupils. They did not

included from all parts of the Kingdom, and those from Ireland were most encouraging.

THE success of Mr. Phil May's Exhibition of Black and White at the Fine Art Society's Rooms in New Bond Street, is increasingly encouraging for Artists. It is comparatively a new thing that well-known Artists should in their life-time offer to the public a collection of original drawings that have already served their original purpose by appearing in a journal or magazine. Up to the present time *Punch* has the run of the business. Mr. Harry Furniss began it with his exhibition of sketches, chiefly political and Parliamentary, that had appeared in that journal. Mr. Linley Sambourne followed suit. Then came Sir John Tenniel, whose work was on view only a few months ago. Now Mr. Phil May, the latest recruit on the *Punch* staff, has had an unqualified run of luck. His pictures have brought him in over £1,000, which, considering that they were all handsomely paid for by the periodical in which they appeared, is a nice little supplement to ordinary remuneration.

AT the annual meeting of the Royal Architectural Museum and Westminster School of Art, the Council had to express regret that the source of income which, above all others, should be well maintained—namely, that derived from the subscriptions of the members of the Architectural Profession—was confined to a fast decreasing body who had from the establishment of the Museum accorded to it continued and generous support. In spite of this fact, the Council were able to speak favourably of the finances of the Institution. This was, however, mainly due to the rapid growth of the Westminster School of Art, which is conducted in the building, the fees from which amounted in 1894 to £898, as compared with £700 in 1893; and to the grants received from the Technical Education Board of the London County Council, amounting to £380. The resignation of the office of President by the Bishop of Ely (Lord Alwyne Compton), who, from the foundation of the

Museum had been one of its warmest friends was recorded with regret, and the vacancy was filled by the Duke of Westminster. Those taking part in the proceedings included Mr. W. C. Cocks (who acted as Chairman at the outset), Sir A. Blomfield, Sir W. de Souza, Mr. Aston Webb, Mr. M. B. Adams, Mr. S. W. Lee, Mr. C. H. Hayward, Mr. W. Pain, and Mr. J. Seddon.

WE are desired by the Committee of the University Hall, to state that the competition designs for the New Settlement Buildings, Gordon Square, will be on public view at Dr. Williams' Library, Gordon Square, W.C., to-day (Tuesday); on Wednesday, from 10 a.m. to 10 p.m.; and on Thursday evening. The Architects invited to compete are: Messrs. C. C. Brewer and A. Dunbar Smith, M. S. Hack, Gerald Horsley, A. H. Mackmurdo, E. W. Mountford, Ernest Newton, E. S. Prior, Halsey Ricardo, W. Shirling, F. W. Troup, F. Waller, and H. Wilson. The Hon. Assessor is Mr. R. Norman Shaw, R.A.



THE AMSTERDAMSCH POORT, HAARLEM: SKETCHED BY F. T. W. GOLDSMITH.

compete for prizes, but had medals given to them for general excellence and originality of design and other merits. The Princess of Wales's Technical School at Sandringham had a very interesting exhibition, consisting of neatly made wooden racks, pedestals, stools, bookcases, and articles in copper; and another stand which proved equally interesting was that devoted to the Della Robbia Pottery. About two years ago Messrs. Dressler & Rathbone founded a pottery at Birkenhead, not so much for commercial purposes as to provide an attractive and practical occupation for boys and girls. Pots, vases, window boxes, and tiles were shown amongst the exhibits. A special feature of this pottery is that it will withstand the trial of our somewhat variable climate; and in order to avoid reliance upon merely mechanical work the use of steam power is strictly prohibited. Amongst the attractions of the Exhibition were a spinning competition, a loan exhibit of leather work from South Kensington, and a potter's wheel at work. Exhibits were

ANNOUNCEMENTS.

IN view of the character of this number, the widespread notice it will obtain, and the Professional interest THE BUILDERS' JOURNAL has aroused, we can best make here one or two announcements. We desire also to foreshadow a few further developments.

It was the wish of the Proprietors and Conductors of THE BUILDERS' JOURNAL to design a paper acceptable to the whole of those engaged in what we held and still hold and shall hold to be the Art of Building. We have succeeded beyond our expectation, even beyond our hope. We have full knowledge that in eighteen numbers THE BUILDERS' JOURNAL has sprung into authoritative acceptance and success. It is to consolidate this success, to win our way still further to the honest, critical, scholarly applause of the Profession, and to return the warmth of an exceptional welcome, that we have pleasure in making these announcements, one of which, the addition of large Lithographic Illustrations, we claim to be a bold stroke in these bold days of Journalistic enterprise, for our price and our present standard shall be maintained.

Nor with these immediate announcements shall we halt. Architecture is the grandest, the most definite, the most final of all the Arts; it endures beyond its day and generation; it comes down to us with the early history of the World. And our Journal shall, if we can make it, be worthy its ambition and its history—even its aspiration and its aim.

Our Special Issue.

It has been thought fit by the Publisher, in view of our new and more dignified heading—we have gone to the Saxon for design—and our thick, deeper tinted cover, to post a **Copy of this Issue to every Architect, Surveyor, Borough and Diocesan Surveyor and Clerk to Local Board** in the Four Kingdoms. We are aware that, in a great measure, we are sending to those who in the ordinary way obtain their BUILDERS' JOURNAL. Such duplication is unavoidable, and is of benefit if the thousands of our Subscribers will circulate their additional copy among their Professional or trade acquaintance and friends. This we ask them to do.

Professional Paragraph Forms.

For Professional use we have had designed a novel and a delicately printed Paragraph Form. This has been lithographed in several art tints, and **Fifty Thousand of these Forms** are sent in this distribution by post to all Architects in practice in the Four Kingdoms. Should any Architect fail to receive a number of such Forms, he should at once write to the Publisher, Talbot House, Arundel Street, Strand.

Double Page Inset Illustrations.

—With the Twenty-Seventh Number—the first of a Second Volume—we shall give separate Double Page Illustrations reproduced in the highest style of Lithography, on paper of especial quality. These Lithographic Plates shall equal, if not surpass, any Architectural Illustrations in the World. They will be suited to the frame or to the portfolio. Not exclusively devoted to current Architecture; they shall reproduce some of the finest Ecclesiastical and Domestic Work in Europe and America.

"Men Who Build" and "Our Impressions of Cities" will be made International and will continue to be fully illustrated.

For Contractors and Builders.

Especially for Contractors and Builders throughout the Kingdom who have begged us to strengthen our Contracts, we have determined, at some loss to ourselves, to publish each week an **absolutely complete list of Contracts Open**. We believe this has never been attempted by any other journal. The first complete list will appear in our 27th number.

The Builders' Journal.

MEN WHO BUILD.

No. 17.

MR. WILLIAM YOUNG.

"Architects ought not to live in our cities; there is that in our miserable walls which bricks up to death men's imaginations as surely as ever perished foresworn nun."

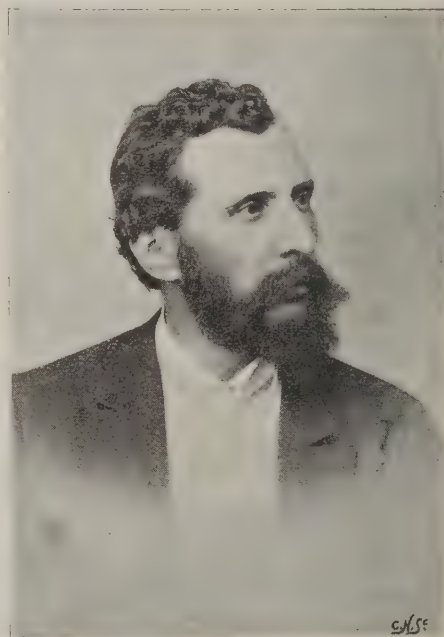


ANOTHER aphorism of Ruskin, and William Young quotes it in "Picturesque Architecture," which he was guilty of dedicating to Henry Howell, six and twenty years ago. These little works, emanating generally from young men in the thraldom of their ambition, do good. They shew emphatically that sketching was not a Fine Art a quarter of a century ago, and that if a few—a very few—could draw in decent perspective, the great majority could not. Since William Young compiled the first of a small series of illustrated works he has grown older, wiser, and nobler. I recently met him in his own house which he built some fifteen years ago, and when complimenting him upon his perfect little abode, he whispered: "Thanks! but I wish I could pull it down and rebuild it." And there we have the spirit of a true Architect. I can imagine him wishing to redraw his "Picturesque Architecture," and to rebuild half his "Town and Country Mansions;" but, then, Norman Shaw has said the same thing about his work.

There was a time when William Young was a Gothicism of the deepest dye. A quarter of a century ago the element was gasping in its last struggle for breath, and as a candle flickers at its brightest the moment before it goes out, the Gothicismists were at their brightest just before the Modern School crushed out the sincerity of what had gone before. I do not assert that William Young was ever a strong Gothic man, but his energy was unceasing, and his convictions terribly sincere. He was of the Burgess School, and nothing could be more self-convinced than that; for Burgess more than once took his convictions down to his scullery sinks and kept them in "touch" with his sincerity. And yet there was a canker worm somewhere in the heart of William Young. He had tramped every square yard of Sussex in his hunger for Norman and Gothic work. He had sketched and drawn and published evidences of his love for the *true* style, and

here he is to-day, steeped to his lips in reactionary Classic, and carving out the work of his life in the orthodox style. Philosophy is staggered, and not for the first time. Burne Jones may yet become a contributor to *Punch*.

Let it be written and known of all men that William Young has succeeded in his transition, whilst other men have ignominiously failed. When Sir Gilbert Scott, R.A., got no nearer than second in the two competitions—for the Home Office and another building, which, at the moment, being away from my books, I forget—it was Palmerston who said it was the first time he had ever heard that the stakes were to be awarded to the second horse "because he did not



win." Scott's design for the Home Office was naturally Gothic, but after its selection old Pam absolutely refused to sanction anything but a Classic building, and so a monstrous injustice to Architecture and to his fellow competitors was perpetuated by Sir Gilbert in the Classic contortion of the Home Office. And yet William Young, having studied and worked in Gothic all his life, submitted a Classic design in the Glasgow Municipal Buildings Competition because, in the words of a young friend—who certainly knows something of his motives—"there was an



GOSFORD HOUSE, FOR EARL WEMYSS: ADDITIONS BY WILLIAM YOUNG.

opportunity to strike out for Classic which he knew he understood and could handle freely." It is a story fresh in everyone's mind how Mr. Young's design was universally awarded the coveted honour, and how Glasgow watched with keen interest the development of his scheme. As the Manchester Town Hall is acknowledged to be the finest Gothic Town Hall in England, so must the Glasgow Municipal Buildings be considered the finest erected under Classic treatment. The peculiarities of modern life do not induce nobleness in our buildings, and if the ultra faddists see nothing truly noble in William Young's Glasgow pile, there is at least dignity and fine proportion, and the evidence of a master mind, in its entirety. Its detail errs, if any way, on the side of profuseness, but profuseness is the bane of all modern work, when mere eccentricity is not the ruling spirit. The fine staircase at Glasgow will serve as a model to all non-individualistic Architects, for we all know the way the Profession can incorporate other men's work by the aid of "plates" and the piquancy of a little "treatment!"

Mr. Young has done but very little ecclesiastical work; restorations and additions to Aberlady Church,—a view of which is given on another page,—a Church at Peebles, and one at Halton, Warwick; but his domestic work is extensive. Chelsea House, Earl Cadogan's fine town mansion, is by him, and he is now engaged upon the practical rebuilding of Culford Hall, the Suffolk residence of the same nobleman. Duncombe Park, Lord Faversham's Yorkshire House, has been twice rebuilt by Mr. Young; Haseley Manor, Warwick, and Holmewood, Hunts, are two of his best Gothic houses, and he is responsible for much at Elveden, Lord Iveagh's beautiful estate in Norfolk; at Chevening, for Earl Stanhope; at Panshanger, Earl Cowper's delightful Hertfordshire home, second only in the county to Hatfield; and at Newmarket, where he built extensively for the late Duchess of Montrose. Gosford House, for Earl Wemyss, is a fair example of additions to an existing work—at times a far more difficult job than to design a new house. At Gosford William

Young has successfully accomplished what few men are able to do. He has remodelled what was already a fine piece of work, has added two extensive wings, and has kept his additions subservient to what already existed. If it wasn't for the mere age of the external stone work, it would be impossible to detect that the house was designed by different men; and without discussing whether this is the right thing to do or whether it is not, it shows a facility for grasping the "spirit" of a building which makes Gosford House one

Drawing Room are not up to the moment's craze in things internal, but what of that! When all is said and done, Gothic was *not* a craze, and it will *not* die, and in that there is a grand consolation. In the intervals of practice—a practice of a nature that demands an enormous amount of personal attendance—William Young finds delight in the higher ethics of life; and it is only with some restraint that conversation does not often turn upon the economics of Social advancement while Modern Art is crying aloud for discussion. A happily disposed man is William Young, of keen artistic temperament, skill in design, and some of his recent perspective drawings are as fine as any that are hung upon the walls of the Academy.

THE excavations at Silchester, which have now been carried on for five years, are daily becoming more interesting. Only recently dye works, with their vats and mills for grinding madder root, have been discovered. The yearly expenditure is from £400 to £450, wages being about £300 and rent of land £35, but the subscriptions do not exceed £300, and the fund is in debt. Our English Pompeii needs a Mæcenæus.

THE proposal that the repairing with asphalt of Fenchurch Street, Liverpool Street, Mansion House Street, and the Poultry should, in view of the inconvenience of interrupting the traffic in those great thoroughfares, be carried on both day and night, has been negatived by the Commission of Sewers by 32 votes to 18. It is estimated that the repairs, with the men working in the daytime only, will necessitate closing the carriage traffic for one week.

THE Memorial to be erected to the memory of the late Earl of Pembroke is to take the form of a Statue to be placed in the town of Wilton, the cost being estimated at from £1,000 to £2,000.

It is said that Dr. Conan Doyle is going to build himself a habitation at Hindhead, in the loftiest part of that Pennine region on the confines of Surrey and Hampshire.

MR. VAL PRINSEP, R.A., opened on Saturday the Sixth Annual Loan Collection of Pictures arranged for the benefit of the people of Southwark and the Borough, held at the local Polytechnic in Borough Road. Paintings have been lent by the Queen, the Prince of Wales, Sir Henry Irving, the Chantry Trustees, and others. The Exhibition is to remain open daily, including Sundays, for three weeks.



A CORNER OF GLASGOW MUNICIPAL BUILDINGS: WILLIAM YOUNG, ARCHITECT.

of the finest things William Young has ever done.

When William Young erected his own habitation in Putney, the Metropolitan Railway had not reached his doors, neither had the speculative builder impeded his view across the green fields, Londonwards. "Ingleside" has his own Gothic influence strong upon it; tempered, perhaps, by more modern touches, in which the softer hand of woman is distinctly noticeable. The mantel of the Dining Room and the angle in the

CONSTITUTION OF THE R.I.B.A.

ELECTION RESULT.

At a business meeting of the Institute, Mr. Penrose, the President, referred to the British School of Archaeology at Athens, and read the draft of a memorial proposed to be sent to Lord Rosebery, urging the claims of the School to an annual grant from the Government. Whereupon it was resolved "That the Council, on behalf of the Institute, do memorialise the Prime Minister in the terms of the paper read to the meeting." The President read a letter from the Secretary of the Burlington Fine Arts Club containing an invitation to students to visit the Exhibition of the Art of Ancient Egypt now being held in the rooms of the Club, and then read the names of those elected to serve for the ensuing session.

President.—Francis Cranmer Penrose—unopposed. Vice-Presidents (4).—Aston Webb, 461; James Brooks, 418; Ernest George, 408; Alex. Graham, 385. Hon. Secretary.—William Emerson—unopposed. Members of Council (18).—John McKean Brydon, 399; George Aitchison, 397; Richard Phené Spiers, 392; Edward William Mountford, 384; Arthur Cates, 376; John Alfred Gotch, 376; John Slater, 374; Thomas Blashill, 367; John Belcher, 366; Campbell Douglas, 364; Edwin Thomas Hall, 360; Thomas William Cutler, 350; Paul Waterhouse, 349; Arthur Edmund Street, 344; Benjamin Ingelow, 340; Edward Augustus Gruning, 334; Henry Louis Florence, 331; Charles Hadfield, 315. Associate Members of Council (2).—Thomas Miller Rickman, 236; Beresford Pite, 216. Representatives of Allied Societies (9).—Alfred Culshaw (Liverpool Architectural Society), Edward John Dodgshun (Leeds and Yorkshire Architectural Society), Thomas Drew (Royal Institute of the Architects of Ireland), John Goodacre (Leicester and Leicestershire Society of Architects), William Henman (Birmingham Architectural Association), John Holden (Manchester Society of Architects), James Jerman (Devon and Exeter Society), Joseph Oswald (Northern Architectural Association), Thomas Lennox Watson (Glasgow Institute of Architects) [unopposed]. Representative of the Architectural Association.—William Douglas Carøe—unopposed. [The above members, who were declared to have been duly elected, compose the Council.] Auditors.—Fellow, Frederick Todd; Associate, William Woodward—unopposed.

The Standing Committees. Art Standing Committee.—Fellows (10).—Ernest George, 398; William Douglas Carøe, 388; Edward Ingress Bell, 376; John McKean Brydon, 374; Alfred Waterhouse, 372; James Brooks, 368; Edward William Mountford, 344; John Belcher, 342; Frank Thomas Baggallay, 310; William Young, 230. Associates (6).—Beresford Pite, 319; George Campbell Sherrin, 311; George Kenyon, 304; William Henry Romaine-Walker, 289; Henry Thomas Hare, 287; Alexander Nisbet Paterson, 282. Literature Standing Committee.—Fellows (10).—Alexander Graham, 422; George Aitchison, 414; Richard Phené Spiers, 402; Arthur Edmund Street, 376; Paul Waterhouse, 375; Frank Thomas Baggallay, 373; Benjamin Ingelow, 369; Edgar P. Loftus Brock, 361; Sydney Smirke, 341; Frederic Chancellor, 280. Associates (6).—Arthur Smyth Flower, 377; Andrew Noble Prentice, 376; Leslie Waterhouse, 337; Percy Scott Worthington, 333; Ravenscroft Eley Smith, 321; Banister Flight Fletcher, 216. Practice Standing Committee.—Fellows (10).—Edwin Thomas Hall, 353; Lacy William Ridge, 308; Samuel Flint Clarkson, 305; Thomas Batterbury, 282; Henry Cowell Boyes, 280; Joseph Stanislaus Hansom, 275; Walter Hilton Nash, 272; Edmund Woodthorpe, 265; George Enoch Grayson, 264; Edward Augustus Gruning, 261. Associates (6).—William H. Atkin Berry, 377; Augustus William Tanner, 358; Henry Thomas Hare, 346; Robert Stark Wilkinson, 341; Frederick Henry Appleton Hardcastle, 335; George Richards Julian, 297. Science Standing Committee.—Fellows (10).—William Charles Street, 398; Herbert Duncan Searles-Wood, 394; Lewis Angell, 391; Percival Gordon Smith, 385; Arthur Baker, 372; John Salmon Quilter, 368; Henry Tanner, 353; Henry Dawson, 334; Benjamin Tabberer, 330;

William Warlow Gwyther, 323. Associates (6).—Henry William Burrows, 353; Francis Hooper, 332; Max Clarke, 326; Bernard John Dicksee, 299; George Pearson, 280; Matthew Garbutt, 275.

The following candidates for membership were then elected—

As Fellows—Charles Busted Fowler (Cardiff), Francis Thomas Dollman [A.] As Associates—Herbert Phillips Fletcher, George Hubbard, John James Joass, Geoffrey Prater Armstrong, Walter Robert Jaggard. As Hon. Corresponding Members—Alexander Wielemans (Vienna), Ferdinand Fellner (Vienna).

THE FINEST VILLA IN THE WORLD.

THE new Villa for Mr. Cornelius Vanderbilt, built at Newport, Rhode Island, in place of the "Breakers," which was destroyed by fire about three years ago, is said to be the finest summer residence in the World. Situated high on a point in Newport's famous cliffs, a view from any of its windows takes in a marine picture of great attractiveness. The building is of Indiana limestone, and as there is not a particle of wood, it is considered to be absolutely fireproof. There are terraces all about the house, which is practically in three sections—a main house and two wings. Within are superb carvings, massive pillars of onyx and other marble of the most delicate shades, and a wreath of beautiful paintings. Mosaic figures and borders abound, all of which, as well as the paintings and carvings, have been executed by a corps of Italian artists. The Hall is in the centre of the house, and is spacious. From it, through many great doors, the Drawing Room may be entered on the left, the Dining Room directly a-head, and the Billiard and Reception Rooms on the right. Its height is limited only by the roof of the structure, and a Gallery runs completely around it at the second storey. The Architectural features and decorations are very fine, while the staircase and balustrade show some remarkably fine carvings. The Hall, like the Drawing Room, is as yet unfinished. The Dining Room is marvellously appointed, the altitude being two storeys of the house proper. Its windows are very high and arched above, and then there are smaller super windows. Every one of these opens upon a side terrace, from which a view of the sea may be obtained. The walls of the Dining Room are principally of Italian marble, with here and there an embellishment of mosaic work or tiling. They are, however, divided into sections by onyx pillars, which support heavy arches high above, the colouring of which is of old gold, bronzes, and pinks, blending delightfully and prettily carved. The ceiling is a series of paintings within a rich framework formed by the arches. The central design is an ethereal figure, driving three white horses with ribbons through the clouds. The picture is about 10 ft. by 5 ft. The other pictures are smaller, and represent children making garlands. At one end of the room is an immense fireplace, the setting of which is in conformity with the other appointments of the apartment. The Billiard Room, which adjoins the Dining Room, is no less beautiful. Its decoration is on Oriental plan. Everything is mosaic, in which the Artists have brought about some superb creations. The colours are generally dark, black and browns being used to a marked degree. The room is square. Its walls are broken into panels by heavy mouldings, while its ceiling is divided into domes and concave surfaces by arches and borders in relief. In this room every inch of walls and ceiling is mosaic, and the designs, it is claimed, are all original. Adjoining the Billiard Room and occupying with it the whole southern side of the house is a Reception Room or Library. Its walls, it is said, are to be hung with tapestries. The general style of the room has, however, not yet been developed.

Two stained glass windows have just been completed in Darrington Church, near Pontefract, at the expense of Major W. F. Lee. The Tower of this Church is under repair, and it is also intended to repair the bells and add a fourth one if the necessary funds—about £500 in all—are forthcoming.

ANCIENT CHURCH ARCHITECTURE IN THE MIDLANDS.

MEMBERS of the Archæological Section of the Midland Institute, Birmingham, recently visited Middleton. A short stay was made at Sutton Coldfield Church, which dates from the 12th century, but of this early structure only the south doorway—a good specimen, enriched with zigzag mouldings—a very rudely constructed Norman window on the north side of the Chancel, and some pieces of rubble walling remain. Of the next century, there are the North Aisle, which has a singular arcade of pointed arches, and a very graceful triplet of lancets in the east gable of the North Aisle, beneath which was once an Altar, as is evident from the brackets for statues, and a very interesting hagioscope, or squint, which, piercing the Chancel wall obliquely, affords a view of the High Altar from the east end of the Aisle. Previous to this addition the Church was but a very small and simple Norman structure of rude masonry. In the fifteenth century the strip roof, which probably covered both Nave and Aisle, was replaced by roofs of very flat pitch, and an upper tier of windows was added. The Tower is a good one of the 15th century, and of a distinctly Warwickshire type. The "Aylesford collection of drawings of Warwickshire antiquities" shows that it had, a hundred years ago, a tall and graceful spire. How this was destroyed is not known. The fittings and furniture of the interior are modern—all but the rood-screen, which, though mutilated, is an interesting example of late 15th century date. The Church retains several interesting sepulchre monuments—one, a fine and rare example of a brass to Sir Richard Bygham, a Justice of the King's Bench, 1476, and by his widow. There are also an interesting Jacobean mural monument and a marble monument of the 18th century to Sir Francis Willoughby. The party then drove on to Middleton Hall, the residence of Mr. Egbert De Hammill. The Mansion is of very many dates, extending from the 14th century to the Georgian period. Of the more ancient parts only a domestic Chapel can now be distinctly made out. This has an ambury with credence, and it retains a wagon-headed roof. It has, however, been divided by floors into three storeys, and can only be made out by careful search. There is a second Chapel of the 15th century, with very good arched and carved roof trusses, with wall posts and shafts ascending from the floor. Connected with the east end a very curiously contrived chamber of framed timber appears to have been utilised as a means of escape from the Chapel. The greater part of what remains of the Hall, so far as can be seen, is Georgian, the Hall and Staircase being very fine, with good details. A range of out-buildings of the Tudor period has been much altered, but retains interesting features. A moat, now dry, surrounds the house, enclosing a large area. Kingsbury was next visited, when the Church was carefully examined under the guidance of Mr. J. A. Cossins. Originally a Norman structure, it retains interesting features of that period, but has been much added to and altered. The Bracebridge Chapel of the 14th century is the most interesting feature, but this has been sadly pulled about, and latterly an Organ-Chamber has been built within it. What remains of the walls of the Castle Court, of probably the 14th century, and the Manor House, mainly of the time of Elizabeth, were then seen.

New Sunday Schools and Rooms are to be built at St. Michael's, Stoke. The building is expected to cost about £1,200, exclusive of between £200 and £300 for furniture.

An Exhibition of Examples of Stencilled Decorations, designed at Mr. Arthur Silver's Studio, is being held at 26, Garlick Hill, near the Mansion House Station. The object of the show is to prove that the use of stencils, far from being, as is generally imagined, an absolutely mechanical proceeding, is really a decorative process of great value. The exposition of the claims which this method of adornment has to serious consideration is made so complete that it can hardly fail to be convincing.

THE NEW CATHEDRAL AT WESTMINSTER.

RESTORING THE BENEDICTINE ORDER.

THE site of Cardinal Vaughan's future Cathedral, at Westminster, is at length showing some signs of preparation for the 29th inst., on which day the first stone of the building is to be laid. The Cathedral of Westminster has from time to time been much discussed in Roman Catholic circles. It was mooted for the first time soon after Cardinal Wiseman's death in 1865, a subscription being set on foot to commemorate his services to his Church by raising a Cathedral which should be to future generations a perpetual reminder of them. Doubtless they will be duly chronicled in the majestic fane which is being begun at Westminster, along with those of Manning, his friend and immediate successor. The amount raised at that time (something like £16,000) did, indeed, form the nucleus of a fund for the purchase of a site—not the present one, however, near Victoria Station. About ten years subsequently the Cathedral was again talked of, and an elevation plan, designed by Mr. Clutton, Cardinal Manning's nephew, was issued as a supplement to the *Tablet*. His designs did not find general favour, his selection as Architect being adversely discussed. Cardinal Manning sank his own predilection in favour of the Italian style of Architecture, deferring to the general preference for Gothic as being more native to the soil. Cardinal Vaughan, who, by the way, sometimes wears the Gothic mitre and copes, cherished by Wiseman and abhorred by Manning, has other views. The new Cathedral will certainly not be Gothic. Mr. Clutton's plans were laid aside, but the leaders of Anglo-Roman Catholicism were not really unmindful of the scheme, for a more favourable site presenting itself, they quietly effected its purchase, and it was said at the time that the vendors thereof were mightily annoyed when they found the purpose to which the fine piece of land was to be devoted. Not long afterwards the actual building was again talked of, and this time the proposal was made by Sir Tatton Sykes, an Anglican, to present to the Roman Catholics a Cathedral which was to be a copy of the famous votive Church of St. Stephen at Vienna. Again the *Tablet* presented its readers with a drawing, and again, for reasons which were not made public, the scheme came to nought. That it was not carried out can hardly be a matter for regret. It was hardly fitting that an ecclesiastical building of first-rate importance should be a mere reproduction of an essentially foreign style little suited to the smoke and soot-laden atmosphere of London. This time, at any rate, the scheme is to become an accomplished fact, and that on a scale which promises to be worthy. Mr. Bentley, the Architect, has done good and solid work of such dignity as to leave little room for doubt of his success in the present instance. His is a chance granted to few, and the absence of competitive designs frees him from any danger of haste. It is understood that the exterior of the building

will be plain and severe, and that ornamentation will for the most part be confined to the interior. Mr. Bentley, who has recently travelled in Italy to refresh his memory in its grand basilicas, may reasonably be expected to reproduce something of their calm beauty. Unfortunately it will be too much shut in to add

Benedictine Fathers. And it is this fact more than the dignity of the material building which will make the new Cathedral of Westminster an important factor in the religious life of London. In this respect it will be practically unique, for, save in the country Cathedral at Belmont, near Hereford, served by the monks of the same Order, there has not been in any Roman Catholic Cathedral in England any attempt since the time of Mary to carry out the complete services of the missal and breviary in their unbroken yearly round. In the new temple of English Roman Catholicism the thread of choral offices according to the ancient use, snapped more than three hundred years ago, will be resumed, and its roof will resound with the monastic chant at the daily High Mass and Vespers. These, as well as the other hours of the breviary, will be publicly performed each day as regularly as matins and evensong at any Anglican Cathedral. The regular fulfilment of choral duties on any large scale imperatively demands an important Cathedral establishment, with relays, so to speak, of officials set apart for the purpose. It will be necessary, therefore, to find house room for a considerable number of the Benedictine Monks who have undertaken to perform these duties. Their return to Westminster is a matter of wide interest. The foundation walls of the new building will enclose a space about 354 feet in length by 160 feet in width, so that the Cathedral, when finished, will be of noble proportions. This space is now being made ready for the ceremonies of the 29th inst. A temporary Altar will occupy a small enclosure near the Cardinal's house. Near it there will be seats for numerous ambassadors and notabilities, besides nearly 300 clergy, including several bishops.

THE Government has now chosen a site for the proposed Statue of Oliver Cromwell. It will be placed in the centre of the spare ground at the side of the Old Law Courts, to the immediate west of Westminster Hall; and, as the ground is sunk there, the pedestal will rest on a base, so that the foot of the Statue may be raised above the level of the roadway. The execution of the Statue, which is to be in bronze, will be entrusted to Mr. Thornycroft.

ROSSLYN's famous Chapel has been enriched by the addition of two beautiful stained-glass windows. One is from Blanche, Countess of Rosslyn, and the other from the Duchess of Sutherland.

THE Memorial to be erected to the memory of the late Earl of Pembroke is to take the form of a Statue, to be placed in the town of Wilton, the cost being estimated at from £1,000 to £2,000.

It has been decided to erect a new School Chapel on a site in Gidlow Lane, Wigan. The estimated cost, including site, is £1,400.

A HANDSOME Jacobean Mural Tablet has just been placed in Holsworthy Parish Church. The Tablet is composed of Sicilian marble, black marble, Portland stone, and bears family coats of arms for the past 200 years. It was executed by Mr. E. C. Westcott, of Dorchester, and is a splendid piece of workmanship.



NORTH-EAST ANGLE OF LADY CHAPEL, YORK MINSTER :
SKETCHED BY C. E. MALLOW.

Architectural beauty to any broad thoroughfare, but to the building itself its retired site will doubtless be a gain. Quiet will be assured, for the roar of traffic is well shut out from the great square, and quiet is essential to the fullest effect of the daily offices of the Church, which will be performed morning and evening by the

THE A.A. DINNER.

CRITICAL AND — CONTEMPLATIVE!

THERE is a contemplative as well as a critical side to Architectural interests, and the pleasant little "A.A." dinner at the Holborn Restaurant, on Friday night, struck the happy hour between the two. It is easier to be contemplative than critical—after you have dined—and we rather fancy that Charity got into the bowl. But no one was the worse for that, and all lived to fight another day. What suggestion was attempted was of the opulent order, brave words about New Buildings and Aspirations and Day Classes and generously to be spent-money, made one think that even Architecture was to have its Golden Age—Why not? The dinner and the discursive discussion disagreed with nobody, unless he were a churl, and the respectable show of spirits—in the loftier sense—made one quite sure that the A.A. is going to press onward to the mark of its high calling. So the little dinner may have signalled an epoch as well as satisfied an epicure. Much may be done, we know—after dinner—or dreamed; or determined; and tobacco, good fellowship, enthusiasm and decent wine have helped onward many a mighty movement, and we are glad the "A.A." dinner was a distinct success. Mr. E. W. Mountford was, of course, in the Chair for the last time, and many regrets paved his progress to the Council of the Institute.

Mr. A. Beresford Pite, in proposing "The Royal Institute of British Architects," said he was sure everyone of them wished well to it. They would not go out of their way to thank it for the handsome subscription to their education scheme; that was a blessing they were bound to take as a matter of course, but they were gathered together that night really as a representative body. They looked on every member of the R.I.B.A. as a fellow Architect actuated by the same high motives. (Hear, hear.) He thought it was quite impossible to conceive the Art of Architecture existing in England and being practised by Englishmen without there being a drawing together in some way of those individual practitioners of a common Art; and if they would grant that proposition they granted it practically as a proof of the necessity for the existence of such an Institute as they had in London—(applause)—for that Institution could not be representative unless all Architects cordially and heartily helped in making it representative of their own convictions. None of them could be so selfish in their own little view of life as to imagine that there were not more than one side, or two sides, or three sides to the vast variety of artistic problems with which they were brought face to face; and the discussion of those problems, and co-operation in dealing with them, was essential to their well-being as a Profession and body of Architects. One had only to look at the Institute generally to be conscious that a vast deal of work was done by that body—work which he could conscientiously recommend to the consideration of every member of the Association. He pointed out that one of the great advantages given to the new student was the admirable Architect's Library, and said such a Library, selected by Architects, and arranged by Architects, was an essential to their Profession. He next drew attention to the students' list of competitors and the various prizes, medals and rewards offered, and said that no one could deny the vast good done to any Profession by having a representative body of judges of students' competitive work, and by giving prizes for such subjects which would draw out the latent talent of the rising generation. The Institute did that for them, and did it in a broad and generous spirit. He ventured to throw out, what might be a timely hint, that should any attempt be made to confine this good work they would have to drink the Institute's health very low down in their toast lists at future dinners. He humourously referred to the fact that the Institute bestowed upon them a Journal and a liberal education upon the Art of officialism and red tape. One was forced to ask, he said, a very pointed question. Was the Institute resolved that it was quite impossible for it to do anything to further the interests of Architecture as an Art? They all admitted what the

Institute had done for Architecture as a Profession, and its usefulness with regard to fixing the professional status of a professional man; and they might hope that renewed health and increased vigour would produce an activity which would bring some artistic influence to bear upon them as a body. (Hear, hear.) He could not help hoping that the Institute would set itself the task of trying to solve the very apparent problem how best to further the interests of the Art of Architecture. (Applause.) It was not very easy for a youngster to dictate to so august a body as the Institute, but he thought the competition for prizes ought to be indefinitely extended. Why should not the Institute inaugurate a School of Design by inaugurating a series of rewards for Design? He did not see that it was at all impossible. (Hear, hear.) They were all cordial well-wishers for the Institute; and they wished it well in everything that would benefit themselves as professional men, but they certainly wished it renewed health—fresh health—and invigorated strength in all its dealings. (Cheers.)

Mr. Florence, in reply, said he was only informed a few minutes back that he was elected to respond to the toast. He had had no opportunity to prepare any of those carefully studied impromptus that were such an ornament to after dinner speeches. One would almost think, from Mr. Pite's remarks, that the Institute and the Association were entirely two separate and distinct bodies, but after a little further consideration they would see that those distinctions were more in matters of form than in reality. One was that the Association was enabled yearly to have a dinner—(laughter)—in the Institute it was one of the rarest things they did, so that looked as if the Association were more thriving than the well-paid members of the Profession. They who were members of the Institute, had nearly all of them been members of the Association, but they carried with them into the offices of the Institute the same feelings and the same ideas that they used to have when they held similar offices in the Association (applause). They had possibly altered some of those impressions (laughter), but they used to make the same sort of speeches ten or twelve or twenty years ago. After all, they were two grades of members of one large body, united by the same ideas. They had heard so many suggestions from Mr. Pite that he hoped he would have given them some idea as to how something might be done. One point seemed to refer particularly to the establishment of more prizes and higher rewards. That could scarcely be seriously considered, because if it was to be taken at all in that view the position of the Institute in regard to its financial condition would have to be very seriously considered. They certainly had no funds with which they could establish a series of gold medals, which seemed to be distributed with some profusion among members of the Association. When he was looking through the balance-sheets of the two Associations, he discovered a great amount of money spent by the Association on meetings of a festive character (laughter), and it seemed to him that the financial monetary assistance rendered by the Institute did not suffice to pay for this. Another point which he thought should be regarded was that they were not the Royal Institute of London Architects; they were the Institute of British Architects. Many of the suggestions that had been made, and many of those who made them, had rather seemed to take the point of view that they were representatives of London Architects alone, but he could assure them that in the deliberations at the rooms in 9, Conduit Street, the affairs of the Profession in the provinces received a large amount of attention, and a very great portion of the Institute's inadequate funds was expended in purposes connected with the provinces, an expenditure for which there was no definite or immediate gain to be shown, but it maintained greatly the good fellowship which the Institute endeavoured to promote among Architects in every part of the United Kingdom. As the Institute was recruited weekly and monthly and yearly from the Association, it followed that the development of its action in the future, and any efforts that might be made by it to increase the opportunities for the cultivation of Archi-

itecture as a Fine Art, depended very greatly upon the votes of their members. He must take it on the whole that the policy of the Institute was approved by the whole of the United Kingdom, because they saw how frequently the Council was returned to office, with the addition, sometimes of no change at all, and very frequently with a change of only one or two names. Therefore, in thanking them for the way in which the toast had been proposed and received, he felt he might say that the Association supported the Institute. (Applause.)

Professor Simpson proposed "The A.A." He admired the way the A.A. had stuck to its early love—that of Education—through thick and thin. The A.A. had gone steadily ahead, improving year by year, its scheme of education for Architectural students, and in consequence it was the one body in England to which every one interested in the question of Architectural Education turned for advice. One thing he was certain of and that was that in whatever way the A.A. might change, it would always receive the loyal support of its members. (Applause.)

Mr. W. H. Seih-Smith, in responding, said they wanted young blood in their Association, and they prided themselves on having a large amount of it (hear, hear). He supposed that they were evolving a more important institution out of the A. A. gradually. The evolution theory seemed based on environment. They certainly were becoming more charitable; the remarks made that night showed that there was a very kindly feeling existing between the Institute and themselves. The Association certainly did deserve the words of commendation uttered by Professor Simpson. There was no doubt that the Architects in England, especially young men beginning their studies, did look to the A. A. as being the body under which they could get education in the best way to train themselves for the Profession. The scheme which had been working now for two or three years was a great step forward, and he was confident in saying that it had met with very great success (applause). There were various reasons—and he did not think he was alone in his opinion—to lead one to think that some modification of that system would be necessary. It seemed to him that their Evening Classes must be kept up and developed in every way, and there was no doubt they would be a great success, but they must in addition to that have Day Classes with a thorough curriculum. (Hear, hear.) He thought the thing which crippled them most was the premises which they now occupied. They certainly ought to endeavour to build something for themselves. They wanted a good building; they did not want an expensive one, but a building which would be exactly adapted to their purpose, and then they would be able to establish Day Classes. It did seem to him an extraordinary thing if among the ten or twelve thousand Architects of England, they could not raise £5,000, which would be ample to build something of that kind. They must not rely on outside help; they must rely on themselves. He knew what an immense amount of time Mr. Mountford had spent on the Association during his two years of presidency; he knew also that this particular question of premises had been very near his heart from the beginning. (Applause.)

Mr. Banister Fletcher gave the toast, "The Instructors and Studio Visitors." He said the Instructors were mostly Architects, and had all been selected for their special aptitude in certain directions. The duties of an Instructor were, he believed, to instruct, but he thought the Instructors of the A.A. recognised more than that, and acted on the principle that their duties were rather to show the Students how to instruct themselves. (Applause.)

Mr. Farrow remarked in response that the endeavour of the Instructors had been to follow out the principles which guided the Education Committee when it formulated the present curriculum, to give the Students such an education as to make them Architects, and not merely to cram them for examinations. (Hear, hear.)

Mr. Stirling Lee said they were doing the highest and best thing in trying to combine the Arts, and in bringing all the Students in association with those men who were trying to work out all the problems connected therewith;

and if they could by any means relieve the Students in their studies, he was sure everyone would feel that they had done good work. (Hear, hear).

Mr. Goldsmith proposed "The Visitors," coupled with the names of Mr. H. W. Burrows and Mr. W. S. Weatherley. He said if ever there was a Society that was honoured by the friendship of men who represented all kinds of thought and all modes of work, the A.A. was that Society.

Mr. Burrows and Mr. Weatherley responded.

The Chairman, who was received with much enthusiasm, then proposed the health of the new President, Mr. Carøe. He said the presidency was no light position to hold, but he thought that with the courage and strength which Mr. Carøe had shown in his daily life he would successfully overcome the difficulties he would have to encounter later. (Hear, hear). It had been his (the Chairman's) good fortune to be intimately associated with Mr. Carøe for some years past both in the Association and the Institute; and he knew well the powers he had shown both on their Committee, and as hon. secretary of the Committee of the Institute, and also as member of the Council of the Institute, powers that would enable him to carry on the word of the Association to a higher pitch of excellence than it had yet attained. (Cheers).

Mr. Carøe replied, and claimed that he had done at least one thing for the Association, and that was when he gave to them as permanent secretary, Mr. Driver. (Applause). He concluded by proposing the health of the Chairman, which was accorded with musical honours.

The Chairman briefly replied and then gave "The Retiring Officers," which was responded to by Mr. Goldsmith and Mr. F. G. F. Hooper.

The proceedings shortly afterwards terminated.

NORTH OF THE TWEED.

NOTES FROM GLASGOW.

[BY OUR CORRESPONDENT.]

BUILDING in Glasgow continues to be brisk. Besides those intended for ordinary dwelling-house accommodation there are in progress and in prospect many buildings that, from their extent, their purpose or their design, are of considerable importance. The 28th of May is term day in Glasgow, and as it gives over possession there are always awaiting it many sets of plans, either of new buildings to be built or of existing ones to be converted. The business following the 28th is now added to that of a season of unusual activity, and speaking generally, Architects and Builders have not been so fully employed for a long time. The Dean of Guild Court, held previous to the term, was the heaviest on record; the total cases numbered 81, and the value of the linings presented to the Court amounted to the large sum of £146,000. At the last Court 28 applications, representing a value of over £100,000, were presented.

Among the works about to be commenced are alterations on the Corn Exchange (£15,000), Mr. W. F. McGibbon, Architect; Bible Training Institute and Young Men's Club, additions to the Christian Institute, Bothwell Street, Mr. Geo. Bell, Architect; the erection of Masonic Halls in West Regent Street (£12,000), Mr. J. L. Cowan, Architect; additions to the National Savings Bank at the corner of Ingram Street and Glassford Street, Messrs. John Burnet, Son & Campbell, Architects. In connection with the latter, there has been a little trouble over the adoption of the plans. Government sanction to expend £18,000 of the surplus funds was obtained, but in going more closely into the plans, the Architects found that a further sum of £8,000 would be required to complete them. The Trustees intend going on with the increased estimate notwithstanding adverse criticisms in certain quarters, and to this end application has again been made to the Government Department for permission to draw upon the surplus funds up to £26,000. A fine drawing of the proposed building by Mr. Alex. McGibbon, is presently exhibited in the Royal Academy. Extensive alterations are in progress at the County Buildings, Messrs. Clarke & Bell, Architects of the original, are directing the work.

No street in Glasgow has changed in the character of its Architecture within the past twenty-five years more than the fashionable shopping resort, Buchanan Street. One by one, the old dingy buildings have come down, giving place to edifices more or less important and interesting, till now there remain not more than a dozen or so to remind one of the former order. On the west side, an old building is being rapidly taken down to make way for Cranston's Tea Rooms, Mr. Geo. Washington Browne, of Edinburgh, Architect. Higher up, on the east side, workmen are no less actively employed clearing the site for offices for the Royal Insurance Company, Messrs. Thomson & Sandilands, Architects; and within a stone throw the striking building, erected from plans by Mr. Robert Thomson, for the North British Rubber Company, is fast approaching completion. The narrow frontage to Buchanan Street is bounded to the south by a lane, and to leave every inch available, the Architect has adopted a cantilever principle of construction, thus dispensing with the usual columns supporting the lintels. The very heavy corner masonry pier, forming a jamb to the oriel which is the full breadth of the front, is, in consequence, apparently supported on an inadequate surface of plate glass. The result from an æsthetic point of view is much to be regretted, the more so as the rest of the building is designed on the right lines for a site of this kind.

The extended premises built for the proprietors of the *Glasgow Herald* in Mitchell Street by Messrs. Honeyman & Keppie are nearly finished. The original part of the block facing Buchanan Street was designed by the late Mr. James Sellars, with whom Mr. Keppie was associated for a time. The new erection, which is partly used for Warehouses and Shops, is as perfectly fireproof as possible, and a prominent feature has been made of a lofty Water Tower, the contents of which are to be used in case of fire. As a result of this precaution the Fire Insurance Companies take discount off the ordinary rates. The design of the building is interesting, and displays, more especially in the treatment of the Tower, the individuality of Mr. Chas. R. McIntosh. While reserving an opinion on much of the detail, which is novel to the verge of eccentricity, one may without hesitation express unqualified admiration at the successful effort which has been made to depart from anything hackneyed or jejune.

The new Art Galleries in Kelvingrove Park, Messrs. Simpson & Allen, London, Architects, are progressing. The erection of the basement will be finished in a month, but the work is not sufficiently advanced to call for further remark. The Committee are now advertising for tenders for the superstructure and the completion of the building. The Theatre Royal, which was gutted by fire last March, is being reconstructed from designs by Mr. C. J. Phipps. A Company will play in the completed Theatre early in September.

The Glasgow Bridge across the Clyde was finally closed against all traffic last week, and is now in the hands of the contractors for demolition, previous to rebuilding. This is one of the busiest sites in Glasgow, as it forms the principal communication between the north and south sides of the river. A substantial Service Bridge, carrying the water and gas mains has been erected a short distance up the river. It was originally proposed to replace it by a bridge of four arches, from designs by Mr. Blyth, C.E., and to re-erect the old Bridge at a point in line with Govan Street, thus providing a new and direct outlet for cart traffic between the manufacturing and engineering districts of the south side and the east end of the City. Chiefly on the score of economy, the scheme was departed from, and the existing Bridge will merely be reconstructed. The Glasgow Institute of Architects made a request for a public exhibition of the drawings, but the Statute Labour Committee replied that as the work was simply one of reconstruction, it did not seem to them necessary to exhibit any drawings. The existing bridge, designed by Telford, consists of seven arches, and is graceful in composition,

and appropriate in detail. Had the first scheme been adhered to the reduction of the number of arches, and the resulting increase in the waterway would have greatly facilitated the navigation of the upper harbour. From an artistic point of view the change is perhaps not greatly to be regretted; too frequently in proportion as Engineering Science becomes greater Architectural Art becomes less. The new Bridge in Kelvingrove Park, replacing the original wooden structure extemporised for the use of the Prince of Wales when he laid the foundation-stone of the University Buildings, is almost finished. It is a pity that the Bridge has been made of a single arch. By raising the level of the Bridge the popular walk on the east side has been cut in two and irrevocably spoiled. A small land arch on that side would have allowed the walk to be retained.

Even in Glasgow, where an almost unequalled water supply exists, anxiety is felt as to the summer months should the present dry weather continue. This is due quite as much to the excessive quantity used in the City as to the smallness of the rainfall. At a recent meeting of the Water Committee the engineer reported that the quantity of water at present drawn into the city exceeded that at the corresponding period last year by nearly four millions of gallons per day. No doubt the constant increase in population has something to do with this. The engineer thinks that one reason for the extra demand made upon Loch Katrine arises from the leaky condition in which many of the pipes inside dwelling houses have been left by the recent severe frost. The *Herald* gives a timely note of warning on this point, and advocates greater economy in the use of the supply.

The Glasgow Institute of Architects (the Senior Architectural body in the City), and the Glasgow Architectural Association, have arranged a scheme of joint occupancy of premises. The Association has for a long time felt the want of more suitable and commodious premises, and the Institute which has hitherto held its quarterly meetings in the Chambers of the Secretary, on being approached expressed a desire to possess more permanent accommodation. A Joint Committee was appointed, with the result that a dwelling-house in a suitable locality has been leased, and after structural alterations, the new Rooms will be occupied in September. A caretaker will reside on the premises, and the Rooms will be open at all times. At the last Quarterly General Meeting of the Institute, eight candidates recommended by the Council, were elected members of the Institute, and the Association is looking forward with confidence to a large increase in its membership and usefulness when the work of the Winter Session commences. The Secretary of the Association, Mr. Walter R. Watson, has been appointed to assist Mr. Wm. J. Anderson, A.R.I.B.A., Principal of the Architectural Department in the Glasgow School of Art.

THE new Schools at Keir Street, Barnsley, were opened last week. The Schools will accommodate 300 scholars, and cost on average £12 16s. per head. The cost of site, erection and furnishing, &c., amounted to £3,765.

A NEW Infant School is about to be erected in the Parish of St. Lawrence, Longridge near Preston. The cost, together with certain alterations to the existing Girls' School, will be £1,000, which will be defrayed by subscription.

At the special meeting of the General Committee of the Walsall Hospital, plans were adopted for the restoration of the buildings which were wrecked by the late gale, and the addition of others, at a total estimated cost of £2,700.

THE Lords of the Admiralty have approved of the sum of £25,000 being included in the Navy estimates of 1896-97 for carrying out alterations in the existing buildings and the erection of new Workshops at Devonport and Keyham. This expenditure will greatly add to the efficiency of the Dockyard, and is independent of the expenditure under the Naval Works Bill of £2,000,000 on Dock extensions at Keyham, and of £30,000 for the enlargement of Keyham Engineering College.

A QUAIN CHURCH IN WEST CORNWALL.

A STUDY IN PERFECT PROPORTION.

THOUGH one of the smallest of the Meneage Churches, St. Mawgan Church, which was re-opened on Thursday, after extensive restoration, is the most interesting in a particularly interesting district of Cornwall. It is one of the typical low-lying Churches of the West, situated in the midst of the village, with elms and ashes grouped picturesquely in its neighbourhood. The Tower is noteworthy among Cornish Towers. It is massively built and well proportioned, with exceptionally fine Pinnacles. There is a good sun dial in the churchyard of last century date. The shaft of the old Cross, full 6 ft. high, is situated 300 yards from the Church, on which some rough lettering may be made out with the aid of a candle at night time, this being the light most favourable for tracing the inscription. The head is gone, but it was probably of the plain cross form previous to the round-shaped head in which the sign was delineated. The Cross may be classed among the earlier Cornish examples, being of late fourth or fifth century date. There are no remains of the Churchyard Cross except, perhaps, the rough stone, 2 ft. square, now lying in the Churchyard, having done duty as a Font Stone. On entering you cannot help feeling what a delightful little Church this is—so simple, and yet what exquisite proportion is to be found in all its details. Surely this Church, with its seven bays of arches, is more than 88 ft. long. Such effect can only be gained by perfect proportion. The capitals are only 8 ft. from the floor, yet the arcade would be too high if raised another 6 inches. Eighteen months ago the roof was falling down, and rain streamed in during rough weather, but yet hardly a new rib has been added to the roofs. All the old timbers have been re-used. The North Aisle and North Transept roofs are grand examples of carved roofs, added to the Church in the early part of the sixteenth century; and they now look as if they had never been disturbed. The carved angels at the feet of the principal ribs had gone, but facsimiles have been made from an old example. It is more than probable that the earliest form of the building consisted of a private Chapel for the Carminnow family. Their Chapel consisted of the present South Transept, to which the Church was afterwards added. The original Chapel may be safely assigned to the Norman period. Most of the east wall and the lower part of the south-west walls of the Chapel may be ascribed to this time. Unfortunately the Chapel suffered by being rebuilt in the early part of the present century, but the east wall is fairly intact in its original state, as a two-light tracery headed window was found during the restoration. This window was blocked up, part of it serving as a chimney at the time of the rebuilding mentioned, and a Vestry was jammed up on the outside, also blocking up a lancet of early fourteenth century date in the south wall of the Chancel. The head and arch of a similar window was discovered further eastward in the same wall. In further evidence of the antiquity of the east wall of this Transept, a Piscina, arched with the long rough stones characteristic of thirteenth century date, was discovered in the wall. It was necessary to connect this Chapel now forming the South Transept with the body of the later Church. The north wall was consequently removed, and substituted by an arcade of two bays, or in earlier times the opening may have been spanned by a stout beam. At the time of the restoration, the opening was spanned in this way, but it was a clumsy and comparatively modern erection, so twin arches were substituted, corresponding exactly with the opposite bays of the Nave arcade. The reasons for this treatment were manifestly correct from the carved capital facing this aperture on the east quoin. The Transept still contains the two stone effigies known locally as the Carminnow giants. The earliest features in wrought stone was found hidden in the wall of the Porch. It is a holy water stoup of early thirteenth century date, in good condition. It is unusually large, and is simply but boldly executed with a square projecting bowl. Perhaps the most interesting feature in the

Church is the elaborate hagioscope, made through the corner of the South Chancel and South Transept walls, which served as a passage from the Transept, or Carminnow Chapel, into the Sanctuary. This passage shows that the Chapel was separated, presumably by a screen, from the Nave. The walls over the passage are taken by piers of granite, one 13 inch thick, the other only 3 inches, the top being arched over. The passage is lighted by a small cusped window. The idea some people have that this was a hermit's cell, and the other similar passages, of which there are two in Cornwall, is erroneous. There is no foundation or evidence for the supposition. The North Aisle was added in the eighteenth century, the previous Church being cruciform. The North Transept is somewhat later. The carved roofs are equal to any in the West of England. All the principal ribs, purlins, and wall plates, are 6 inches wide, richly carved with different patterns; the bosses to these roofs are nearly all original. The Architect, who is familiar with West Country Ecclesiastical Architecture, knows of no other window with carved external jambs like the east window in the North Aisle. The effect of this window is very charming. The old Mausoleum of the Vyvyan family was situated at the west end of this Aisle, blocking up half the west window. This has been removed. There are several fine inscription stones, with carved devices upon them, which have been refixed in their original positions. The task of restoring such a Church has been a hard one, but the work has been well done by Messrs. Eva and Richards, of Helston. The Church may fairly rank as one of the quaintest and most picturesque in the West Country. The Architect for the restoration is Mr. Edmund Sedding, of Plymouth.

Professional Items.

THE number of Educational Buildings in Chesterfield has been increased by a new Board School. The new School is situated at Brampton, close to the Brampton Board School, built by Brampton prior to the extension of the Borough of Chesterfield. Provision is made for 280 children, at a cost of about £3,910. Messrs. C. Rollinson and Sons were the Architects, and Mr. W. Forrest, Chesterfield, the Builder. The place will be heated by hot water.

THE Free Church which is to be erected at Muthill, Perthshire, at a cost of £2,000, is from the plans of Mr. George T. Ewing, Crieff.

A NEW building is about to be erected in Park Row for the Leeds branch of the National Provincial Bank of England, from the designs of Messrs. Perkin & Bulmer, Architects.

THE first of five sets of Public Baths to be provided in Leeds by the Corporation, was recently opened by Councillor John Lowden, who was presented with a handsome gold key of Renaissance design, made by Messrs Chubb, as a memento of the occasion. The building is in the Kirkstall Road, and is built on the same plan as the Batley Baths, with two Entrances, one to the 1st Class and one to the 2nd Class Baths. Between these doors is the Office, above the Manager's House, and to the rear the Laundry. The Baths are arranged on one floor level, so as to obtain easy access and the minimum of labour in working. The size of the 2nd Class Bath is 89 feet by 46 feet, the water area being 75 feet by 30 feet. The depth varies from 3 feet to 6 feet. On both sides and one end is the Spectators' Gallery, to accommodate 250, underneath which are Dressing Boxes, having divisions of polished slate. The 1st Class Bath is 73 feet 6 inches by 33 feet 6 inches, the water area being 63 feet by 24 feet. Here the Gallery only extends along one side. Underneath again are the Dressing Boxes, in this case the divisions are of polished white marble. The Shells of the Baths are of concrete, lined with glazed white tiles. Lantern lights are used principally for lighting, and as little wood as possible has been introduced into the interior so as to facilitate the cleaning, which may be done by means of a hose-pipe. The contract sum has been £6,982, exclusive of land, Architect's fees, and Clerk of Works. Mr. Walter Hanstock, of Leeds, is the Architect.

It has been decided to proceed at once with the building of the new Porches and Cloak Room to St. Paul's Schools, South Hampstead, also to carry out the necessary repairs to the St. Paul's Church Parish Room. The Architect for this work is Mr. W. Hargreaves Raffles, of 9, Argyll Street, Regent Street, and the Builder is Mr. W. J. Moody, of 87, High Street, St. John's Wood.

THE Barnsley Board of Guardians has adopted plans prepared by Mr. G. Moxom for the re-organisation of the Workhouse, at an estimated cost of £500.

THE latest addition to Lynmouth is the Lyn Valley Private Hotel and Boarding Establishment which is situate at the side of the West Lyn and immediately fronting the East Lyn. Exteriorly the appearance of the building is effective, and the interior arrangements, Architecturally and otherwise, are equally satisfactory. The Hotel was designed by Mr. Smith Richards, Architect, of Barnstaple.

A NEW Chancel which has just been added to St. Paul's Church, Esholt, has been consecrated by the Bishop of Richmond. The cost of the work, which has been executed from the designs of Messrs. F. & T. H. Healey, Architects, Bradford, has been generously defrayed by the Misses Crompton-Stansfield, of Esholt Hall, who have erected the Chancel as a memorial to their parents, the late Major-General and Mrs. Stansfield. A new Altar has also been placed in the Church.

THE scheme to provide new Church Schools at Almondbury, Yorkshire, to supersede the old Schools and to accommodate 400 children, was inaugurated last week, when the Foundation Stone of the Infants' School, which will accommodate 130 and cost £1,000, was laid. The new Schools will be on a site of 1,000 yards of land given by Sir J. W. Ramsden, Bart. The Architect is Mr. E. W. Lockwood, of Huddersfield, and the contractors for masonry and joinery are Messrs. Graham & Jessop, of Mold Green, Huddersfield.

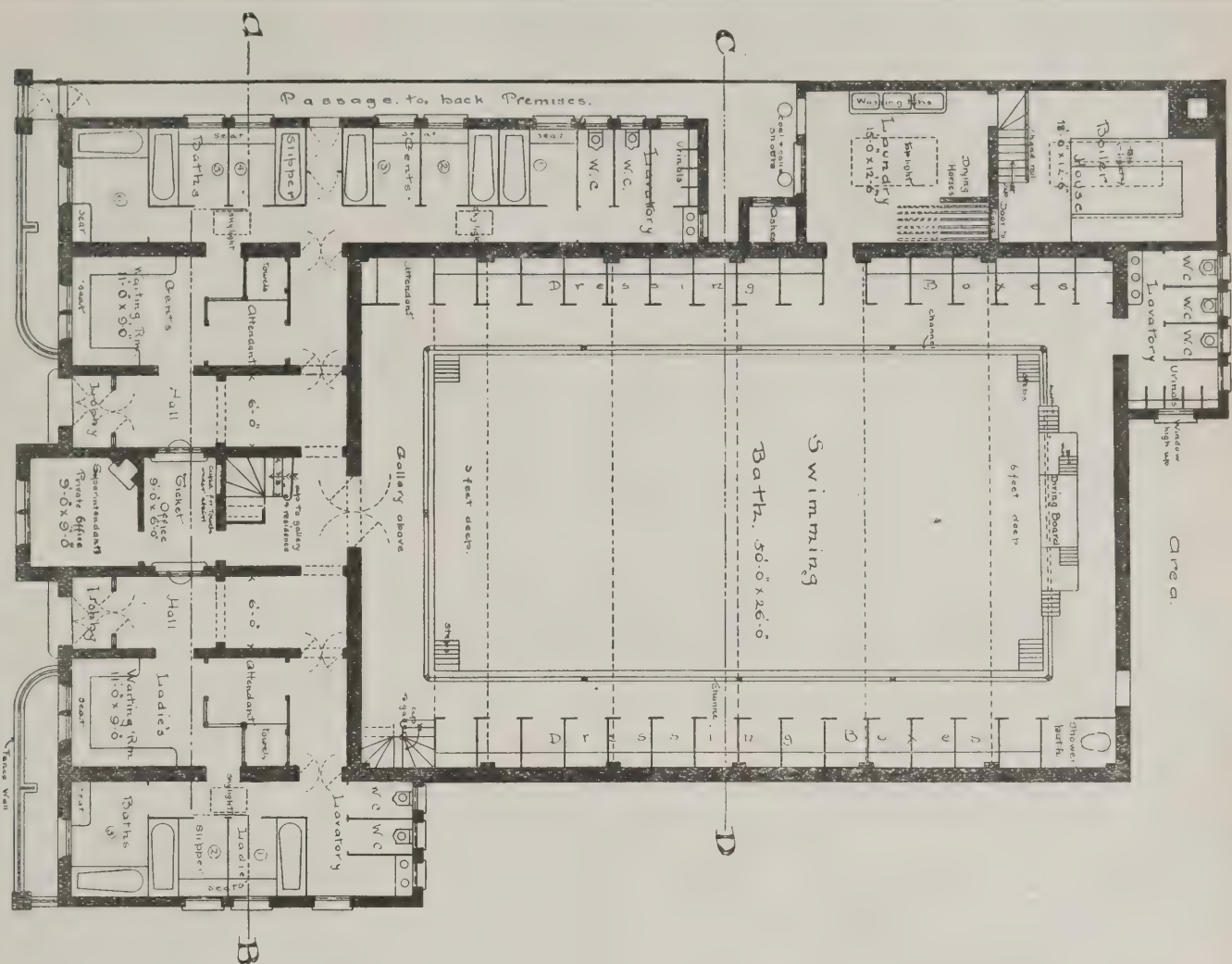
A NEW Wesleyan Chapel has been opened at Garton, near Driffield. The building, which stands within a few paces of the old one, includes a Schoolroom connected by folding doors, to be used on occasion as a Transept, will accommodate 200 people, and has cost about £800. The Architect was Mr. Joseph Shepherdson, of Driffield.

ON a site given by Mr. Walker, of Ravenshorpe Manor, a new Wesleyan Chapel will shortly be erected in Boltby. The building will be of local stone and in the Gothic style, and will accommodate 159. The interior woodwork will be of pitch pine, and the heating by hot air, supplied by the Sheffield Heating Company. The cost will be about £450, and it is expected the building will be finished by October 31st. Mr. T. Stokes, of Thirsk, is the Architect.

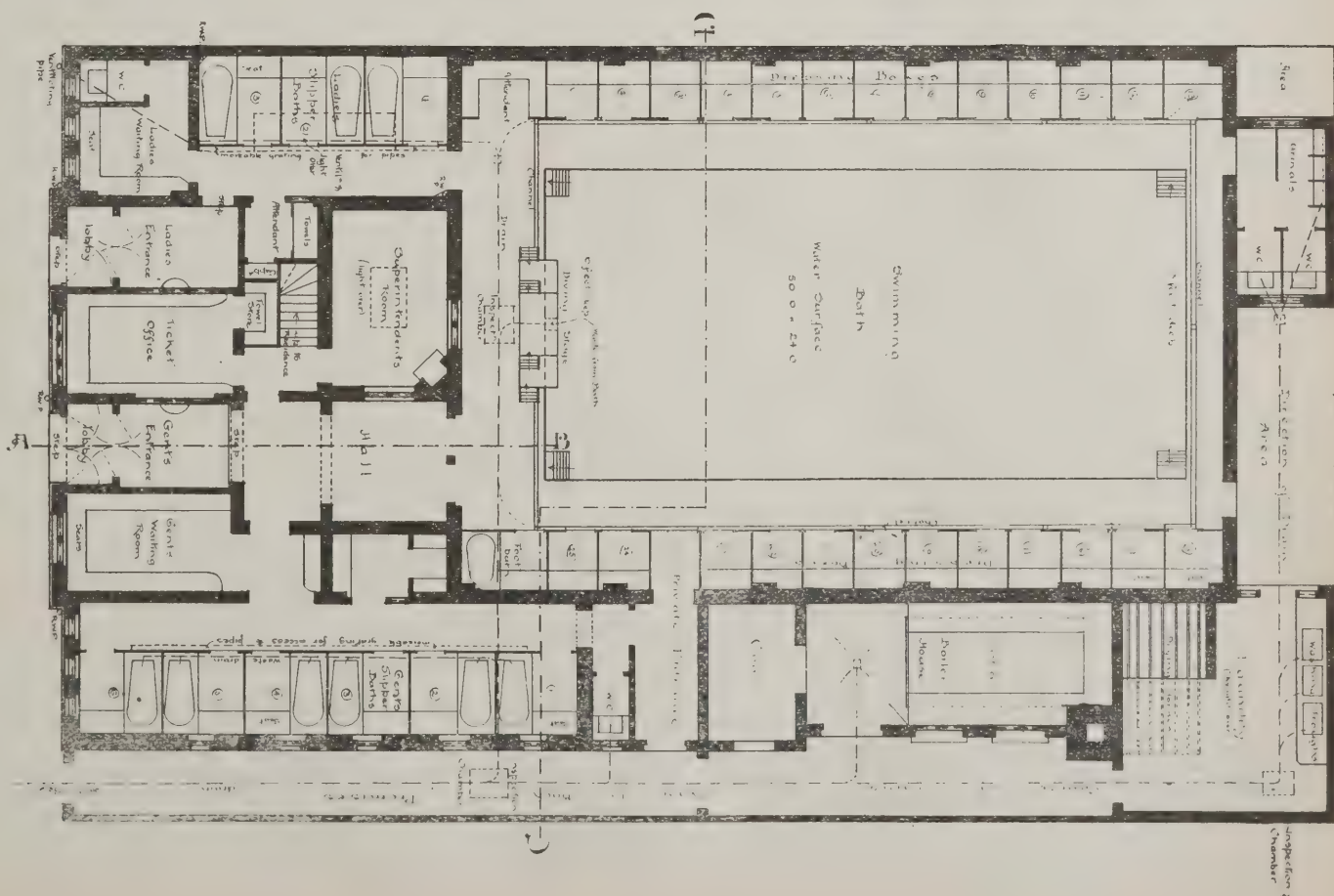
LANCASTER is to have a new Baptist Chapel and Sunday School in Nelson Street. The total cost of the new scheme is estimated to be £5,000, including School, Chapel and land. There was received on sale of the present premises and insurance claim, arising out of the fire a short time ago, £1,845. The Architect of the new premises is Mr. N. C. Lewis, Lancaster. For some years, the existing premises have been found too small, and the fire about twelve months ago brought the question of new premises to a crisis.

MESSRS. AUSTIN AND PALEY, of Lancaster, are the Architects for the new School Chapel, which is being built at Sedbergh, Yorks. The Chapel will be in the Perpendicular style of Architecture. The external walls will be of local stone, with dressings of Yorkshire Cullingworth stone, faced internally with pink flecked Runcorn stone. Roofs and fittings will be of pitch pine—the roof covered with flag slates and surmounted at junction of Nave and Chancel with a wooden Bell Turret, with leaded spirelet. The portion being erected at present will accommodate 280, and will cost £4,098. Messrs. Brassington Bros. and Corney, of Settle, are the contractors.

MESSRS. PUGIN & PUGIN, of Westminster, were the Architects for the Roman Catholic Church of the Sacred Heart in Talbot Road, Blackpool, erected in 1857, which was re-opened last week, after being doubled in size at a cost of £8,000. Mr. W. Eaves was the builder.



1ST PREMATED PLAN,
A. W. NEWMAN, 5, BLOOMSBURY SQUARE, W.C.



SWIMMING BATHS COMPETITION.

2ND PREMATED PLAN,
E. W. BANFIELD, 15, PENFOLD STREET, S.E.

SWIMMING BATH COMPETITION.

THE ASSESSOR'S AWARD.

- 1.—"Mac," A. W. NEWMAN,
5, Bloomsbury Square, W.C.
- 2.—"Shylock," E. W. BANFIELD,
15, Penfold Street, S.E.
- 3.—"Carlos," CHARLES S. STONE,
Woodridings, Pinner.

OF the many sets of designs submitted, unfortunately most have been prepared without knowledge of the details of such buildings. Students should visit existing works and make themselves acquainted with their arrangement as far as possible, and then consider how to utilize their knowledge for a plan on a certain site. It is more agreeable for an assessor to find greater merits than defects, but, with regret, it must be said the latter predominate in the present instance.

After careful consideration I award the 1st place to the design "Mac," 2nd to "Shylock," 3rd to "Carlos."

"Mac" has well arranged separate entrances for ladies and gentlemen, and provision made for ladies using Swimming Bath on certain days. The Plunge Bath, without a gallery, is well lighted and ventilated by top central lantern. No scum trough, spittoons or guard-rails shown. Channel on sides properly away from edge of Bath, but not shown so at ends. When the footway falls towards edge of Bath, it is a difficult matter for the Bath attendant to prevent, when cleaning down, the dirty water getting into the Bath. The Ladies' Private Baths are top-lighted, but I do not see how ventilation is obtained. The Men's Baths should have been top-lighted, the side windows are not sufficiently large for the requisite light and ventilation. The Laundry and Boiler House would be sufficient, but the latter requires to be sunk below water-level for warming the Bath; the Caretaker's Apartments are excellent, more ample than usual. The drawings are very neatly executed. Elevation picturesque, but rather too much the effect of a couple of Cottages, and the ventilating pipe to w.c. is a useful but not an ornamental feature to the front.

"Shylock" has a somewhat similar plan. Shower Bath is shown, but no Foot Bath; footway channel objectionably close to edge of Bath; Ladies' and Gents' Slipper Baths are shown the wrong way, the foot should be to the Corridor. There are small skylights in addition to side lights; a lantern light is the best arrangement; four urinals and two w.c.'s are not required by visitors to six Slipper Baths. Boiler House is properly sunk to a lower level. The Ticket Office would be rather dark without a glazed screen to the Superintendent's Office. A serious point is the position of stairs for superintendent's use; they are too close to the doors to Plunge Bath.

"Carlos" has separate entrances for the men and women. The Swimming Bath is placed at the side of site, thus giving good exits if the Bath be used for public meetings. The Private Baths are top lighted, but there is a great waste in Hall, and, therefore, the plan is not so compact as it should be. Subways are shown for pipes side of Plunge Bath, but there is nothing to indicate that this proper arrangement is continued to Private Baths. The Laundry is the best shown. The Boiler House (wrongly placed on ground level) would be of adequate size. The Caretaker's Apartments are sufficient. The elevation is very bold, and it is a pity that so large a frontage has not been better utilized.

"Myron" shows a simple plan. The Swimming Bath is badly ventilated. The four Caretaker's Rooms are without any fireplaces, two are in the basement, and one of these has the two windows under the entrance steps. It is a pity more consideration was not given to the work.

"Chevron," rather a straggling plan. One entrance only for ladies and gentlemen. Dressing boxes one side and end. Laundry and Boiler House of meagre dimensions. The elevation is of very suitable design, and had the plan been better a place would have been secured.

"The New Boy" shows one entrance only for men and women. The Women's Waiting

Room has a window overlooking Swimming Bath; it is presumed this is a special arrangement for "The New Woman."

"Nemo" breaks the side of Plunge Bath by the bases to the stanchions carrying the gallery; all supports should be next the boxes so as to leave the footway and side of Bath free.

Other sets were submitted by "Youth," "Thomo," "Edina," "Onward," "Fides," "Nautilus," and "Something Attempted." Drawings by "Horseford" and "Endeavourer" were delivered too late for consideration.

JOHN JOHNSON, A.R.I.B.A.

9, QUEEN VICTORIA ST., E.C.

[The Assessor may not object to our remarking that the only instance of really appropriate design in the elevations is that of "Myron," whose drawings we shall publish next week.—Editor, BUILDERS' JOURNAL.]

The Builders' Journal COMPETITIONS.

No. 4.—A Village Church.

Designs are required for a Village Church to seat 200 people. The site is a hill-side, rising one in twenty from North to South, and situate in a stone country. The cost is not to exceed £2,500. Drawings to be submitted on or before Monday the 22nd of July.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eightpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

SOCIETY MEETINGS.

Liverpool Engineers at Rivington.—

Members of the Liverpool Engineering Society paid a visit to the Rivington waterworks of the Liverpool Corporation on the 8th inst. Owing to other engagements, Mr. Joseph Parry, M.Inst.C.E., the Water Engineer, was unable to join the party, who were accordingly accompanied over the works by Mr. R. T. Martin, the Resident Engineer. Proceeding to Chorley, the party drove the full length of the works from Heapey to Horwich, a distance of several miles, halts being made to view the most important engineering features. The various reservoirs, &c., have an aggregate area of 615 acres, and contain 4,107,000,000 gallons of water, and the works are completed by filter beds of over five acres in extent. The Upper Roddlesworth Reservoir is 38 acres in extent, the greatest depth of water being 64 feet, and the total contents about 180,000,000 gallons. The Lower Roddlesworth Reservoir is 16½ acres in extent; the greatest depth of water is 78 feet, and the total contents about 100,000,000 gallons. The Rake Reservoir is 14 acres in extent, the greatest depth of water being 78 feet, and the total contents 80,000,000 gallons. The Anglezark Reservoir is 197 acres in extent, and the total contents about 1,019,000,000 gallons. The two Rivington Reservoirs cover 275 acres, and contain 1,841,000,000 gallons, the greatest depth being 40 feet. The Chorley Reservoir covers 10 acres, and contains 48,000,000 gallons, the greatest depth being 39 feet. The Yarrow Reservoir is 65 acres in extent, and contains 840,000,000 gallons of water, the greatest depth being 93 feet. The filter beds are six in number, each 300 feet long and 100 feet wide and 10 feet deep, and are composed of layers of sand and gravel.

Society of Engineers.—At a meeting of the Society of Engineers, held at the Royal United Service Institution, Whitehall, on Monday evening, the 10th of June, 1895, Mr. Wm. George Peirce, president, in the chair, a paper was read by Mr. Herbert W. Umney, associate, on "Safety Appliances for Elevators." The author commented on the fact that although lift machinery had often been discussed by different learned Societies, yet the accessories had received but scant notice. He said that the importance of the detail selected as the subject of his paper was too obvious to require any apology, brought home to everyone has it had been by the recent sad death of a member of the Profession. The shock, caused by the sudden stoppage of the lift, was referred to, and the effect of a retaining valve noted as confining the consequent increased pressure to the consumer's own pipes. The more general application of a relief valve to prevent pipes being overstrained was advocated. The diaphragms usually placed in direct-acting and suspended lift cylinders to regulate the speed of the ascent were considered all that could be desired as a safeguard in order that the lift might descend slowly in the event of a pipe failing. The introduction of water balances for direct-acting lifts, while removing the danger of overhead gear, introduced another weak point—namely, the risk of the failure of any part between the balance and hoisting cylinders. The author next drew attention to a break-valve fixed next to the hoisting cylinder, which would only allow the lift to descend very slowly in case of any such accident. The subject of gears attached to the cages of suspended lifts was then considered. The increased use of wire ropes was referred to, and the author firmly asserted that when more than one rope was employed to raise the cage, the tension on all the ropes should be equal. Returning then to the improved gear, consequent upon the displacement of hauling chains by wire ropes, he showed a design based on similar principles to former spring gears. After mentioning the remote possibility of all the lift ropes failing at one and the same time, he drew attention to the fifth rope adopted by makers, of which he approved when applied also as a means of checking any excessive speed of the lift while at work. He then illustrated the passing of such a rope round a governor, and also another means of attaining the same object in a simpler way, by passing the rope over a pulley and attaching it to a small weight, which

would actuate the gear by virtue of its inertia when the speed of the cage became abnormal. He pointed out that this latter arrangement acted very well as a safety gear by itself, since its effectiveness varied not merely as the velocity, but as the square of the velocity, of the falling cage. He then complained of the inaction of the Government in not carrying out periodical inspection of lifts by Factory Inspectors, or some such officials.

Devon and Exeter Architectural Society.—At the annual meeting which this Society recently held, Mr. Arnold Thorne was elected president for the ensuing year, and Mr. Crocker vice-president, Messrs. Warren, Commin and Cole, were elected on the Council, and Mr. Tait was re-elected hon. treasurer. The resignation of Mr. Warren as hon. secretary was accepted with regret, and the selection of a successor was left to the Council. Mr. Ballam was re-appointed assistant secretary and librarian.

British Archæological Association.—The members of this Association recently held their concluding meeting of the session, Mr. C. H. Compton occupying the chair. Mr. W. de Gray Birch read a list of the places to be

visited during the forthcoming Congress at Stoke-on-Trent, in August. Mrs. Dent, of Sudeley Castle, sent for exhibition some further illustrations of tiles from Winchcombe Abbey. A paper was read by Mr. Walter Money on Shirburn Castle, Berks, and some notes on four Northamptonshire Churches of the Norman period, from the designs of a French Architect, were contributed by Mr. J. T. Irvine. Mr. R. B. Barrett then read a paper upon Caistor Castle and Sir John Fastolf, which was illustrated by some pen and ink drawings.

Trade and Commerce.

Granite Plaster.—We are glad to hear that our belief in the qualities of Granite Silicon Plaster, tested by us at the Building Trades' Exhibition, is justified, and that the material is worth attention. The manufacturers are The Granite Silicon Plaster Company, of 36, King's Road, St. Pancras.

Withdrawal of Tender.—At the last meeting of the City Council of Liverpool, it was agreed that Messrs. J. Paterson & Son, of Soho

Street, Liverpool, be allowed to withdraw their Tender for the erection and completion of the proposed new Central Fire Station and Police Buildings in Hatton Garden for the sum of £30,770. Alderman Bowring explained that thirteen tenders were received, and the lowest was accepted. After that had been done, the firm found out that it had made a mistake and could not carry the contract out. The Finance Committee was now seeking for new Tenders, and it was hoped that they would be opened in the course of the week. The Real Estate Committee of the Corporation has considered a list of firms who will be invited to send in fresh Tenders. The Liverpool Master Builders' Association has written to the Finance and Estate Committee expressing regret at the decision arrived at on the subject of the Tenders.

The Leicester Building Strike.—The Joint Conference, under the presidency of Sir William Markby, the mediator appointed by the Board of Trade, settled, on the 6th inst., the dispute in the Leicester building trade which has lasted ten weeks. The discussion occupied six hours. The result is that the employers have eliminated their claim to employ non-

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.



GRANITE PLASTER

As supplied to Her Majesty's Government.

You can render and
float in one coat and
set same day.



You can paint or paper
within a few
days from finishing.

It is intended to displace ordinary lime plaster, and the price has been brought down so as to give to the Trade a first-class material, with all its advantages, at about the same cost.

WE CLAIM, BRIEFLY, THE FOLLOWING ADVANTAGES:—

It is fireproof, and a perfect non-conductor.

It presents, when finished, a smooth surface as hard as stone.

It is extremely simple to prepare and easy to apply.

It is the best thing for quick repairs.

It has no rival positively as a structural material.

Our Pamphlet, containing all particulars, will be sent free on application to the

GRANITE SILICON PLASTER COMPANY,

Telegrams :
'Sweetwater, London.'

36, King's Road, St. Pancras, LONDON, N.W.

unionists and piecework from the working rules on the unionists undertaking to allow both for six months. Future disputes are to be settled by a joint board, with a mediator, the old operatives are to be reinstated at an advance of $\frac{1}{4}$ d. an hour before any new hands are engaged, and the employers obtain an additional concession as regard apprentices. The men returned to work on Monday. The plumbers' strike still continues, but it is hoped that the negotiations in progress will bring about a settlement, there being no substantial point of disagreement left.

A Protracted Trial.—The case of Neelon v. the City of Toronto, has been carried to another stage in the Canadian Law Courts. Captain Neelon is a Contractor, who, while engaged in building the Toronto Court-house, was dismissed by the Architect, and who has ever since been trying to get a judgment in his favour. Appeal after appeal has been taken by Captain Neelon since the summer of 1892, who claims to be allowed to offer at his yet untried suit against the City, evidence of bad faith on the part of the Architect, Mr. Lennox, through whom Neelon was deposed. Such evidence, the judge, at the abortive trial of the action, declined to receive until it appeared that the Contractor had suffered an injustice as the result of the Architect's action. The Chancery Divisional Court, says a contemporary, confirmed the judgment of the trial judge in this and his further judgment that the Architect had the power to dismiss without the consent of the Court-house Committee of the City Council, which Mr. Neelon contended was absolutely necessary. Appeal was made to the Court of Appeals, and the Contractor again failed on both the question of the submission of evidence and as to the power vested in the Architect. A further appeal is likely to be taken. The costs of the suit already amount to over £4,000 sterling.

Manchester Sanitation.—Our scathing "Impressions" on the insanitary condition of Manchester, which were reprinted in the local journals, is already bearing good fruit, for we

are informed that the Corporation has recommended that an immediate application be made to the Local Government Board for power to borrow a large sum of money for Sanitary improvements.

Hull.—A scheme for the removal of an unhealthy area in Hull is under consideration by the Unhealthy Dwellings Sub Committee of the Corporation, as to the expediency of declaring insanitary a very large area, extending practically from Lower Union Street, through Trundle Street, to Waterhouse Lane. The scheme is an extensive one, and beset with difficulties; but perhaps the chief difficulty which will have to be faced is to what shall be done with the property when it is declared as unfit for human habitation, for it appears that while the Corporation has power to close the dwellings in the locality, it cannot remove them.

Threatened Strike of Edinburgh Masons.—A ballot was taken last week among Edinburgh Masons to see whether they will come out on strike, should the masters refuse to fix the wages for the coming twelve months at 9d. per hour, an advance of $\frac{1}{4}$ d. The men also want an eight-hours' day, but are willing to refer to arbitration the question whether they should work 45 or 48 hours weekly. The result has not yet been made known.

Water Finding.—Mr. Leicester Gataker, the well-known water finder of Weston-super-Mare, has just been very successful in discovering a good water supply on the estate of Mr. Herbert Strutt, J.P., C.C., near Belper, in Derbyshire. The diviner's predictions as to depth and flow were most accurate, as proved by sinking operations. This water finder has, from continual accounts, been most successful and influentially patronised in all parts of the country. We are informed that when people are sceptical of his powers, he will visit their estates, and bear all the risks himself, and take no pay unless he finds the water. We should imagine there are many landowners and public bodies who might benefit greatly by trying the diviner on such terms.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ACCRINGTON.—Accepted for the erection of a bakery for the Accrington and Church Industrial Co-operative Society, Ltd. Messrs. Haywood and Harrison, architects, Accrington. Quantities by the architects:—

Cronshaw, Thos., Accrington, brick-laying and masonry	£966	0	0
Roberts, John, Accrington, slating ...	61	0	0
Robinson, John, Accrington, plumbing and glazing	79	0	0
Accrington and Church Industrial Co-operative Society, carpentry and joinery	330	0	0

ALNWICK.—Accepted for the erection of a pair of houses, Morpeth, for Mr. T. Sheel. Mr. Geo. Reavell, jun., architect, Alnwick and Morpeth:—

Middlemiss, T. W., masonry and bricklaying	£310	14	2
Haswell, G. and C., joinery	170	0	0
Atthey, T. W., slating	54	7	0
Daglish and Son, plumbing	85	0	0
Fairbairn, R., plastering	45	5	0
Jackson, R., painting	21	0	0
Total	£686	6s.	2d.
[All of Morpeth.]			

BOGNOR.—For erecting a residence at Bognor, Sussex, for Mrs. Ward. Messrs. Kidner and Berry, architects, London:—

Burrell, W., Arundel	£2,269	0	0
Scott, S. J., London	2,173	0	0
Wallis W., Littlehampton	1,949	0	0
Start, T., Bognor	1,668	3	0
Ditto, amended tender (accepted) ...	1,725	0	0

BROTTON (Yorks).—For the erection of co-operative stores, Brompton, Yorks. Arthur Newsome, architect, Middlesbro'-on-Tees:—

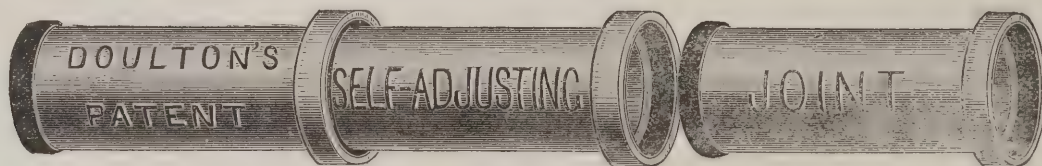
Tenders Accepted.			
Bolton, Loftus, brick and stone, &c. and joiner	£543	7	0
Heckle, Gainsborough, carpenter	348	0	0
Gowland, Skelton, plumber	74	4	4
Patterson, Middlesbro', plasterer ...	66	0	0
Mascall, Middlesbro', slater	51	0	0
Taylor, Middlesbro', painter	45	0	0
Total	£1,128	10	4

CROYDON.—Accepted for additions to Berkley Lodge, Upper Addiscombe-road. Mr. A. Broad, architect, 3, High-street, Croydon:—

Hanscomb and Smith	£268	0	0
[No competition.]			

"It promises to effect quite a revolution in Drainage Work."—THE BUILDER.

DOULTON'S PATENT Self-Adjusting Joint for Drain Pipes.



SUPPLIED ON BEST LONDON-MADE STONEWARE PIPES, EACH OF WHICH IS CAREFULLY TESTED UNDER HYDRAULIC PRESSURE, AND STAMPED



No Cement is required in making the joint, and skilled labour is not necessary.

It is not injured by any ordinary settlement of the ground, being designed to allow deflection.

THE JOINT HAS BEEN LAID WITH SPECIAL FACILITY IN WET GROUND.

By using Best London Stoneware TESTED Pipes, with DOULTON'S PATENT SELF-ADJUSTING JOINT a Secure Joint, in connexion with a Thoroughly Sound Pipe, is obtained.

Pipes with this Joint may be seen under test at the Show Rooms,

DOULTON & CO., ALBERT EMBANKMENT, LAMBETH, LONDON, S.E.

BRIDLINGTON.—For additions, &c., to No. 36, High-street (Contract No. 1); also erection of business premises, North Back-lane, for Mr. Sawdon. Mr. J. Earnshaw, architect, Carlton House, Bridlington Quay:—

Contract No. 1.		
Rennard, J.	£257	10 0
Postill, F. (accepted)	225	0 0
Contract No. 2.		
Rennard, J.	455	10 0
Foster, J. T.	452	5 0
Sawdon, J.	380	0 0
Postill, F. (accepted)	345	0 0

[All of Bridlington Quay.]

BURNLEY.—Accepted for additions to the Victoria Hospital, for the Board of Management. Mr. Wm. Hy. Colbran, architect. Quantities by architect:—

Whittam, Joseph, masonry and brick-laying	£220	0 0
Haworth, John, joinery and building	150	0 0
Ormerod, Whitaker, slating, &c.	22	8 0
Preston and Son, painting and plastering	42	5 0
Watson, William, ironwork	20	0 0
Bulcock, John	6	0 0
Estimated cost, plumbing, glazing, &c.	89	7 0

[All of Burnley.]

BURTON-ON-TRENT.—Accepted for building house and two cottages at Horninglow, for Mrs. Loverock. Mr. R. E. Carpenter, architect, Burton-on-Trent:—

Forbes, Horninglow	£590	0 0
--------------------------	------	-----

BURTON-ON-TRENT.—For building house and stable, Outwoods, for Mr. Haywood. Mr. R. E. Carpenter, architect, Burton-on-Trent:—

Hodges	£422	0 0
Lelly	401	0 0
Owen	372	0 0
Kershaw	371	10 0
Parker (accepted)	357	10 0

[All of Burton.]

CLARBESTON ROAD.—For building two semi-detached cottages for Mr. John Reed, Clarboston, R.S.O. Mr. J. Preece James, architect, Haverfordwest:—

Jones and Lewis, Lawheaden (accepted)	£325	0 0
---	------	-----

CLEETHORPES (LINGS).—For the erection of a public hall and club house. Mr. John R. Withers, architect, Shrewsbury:—

Nutley and Mashford, Cleethorpes... ..	£4,594	4 3
Ion and Lewis, Grimsby	4,337	7 3
Leafe, James, Boston... ..	3,395	0 0
Hewins and Goodhand, Grimsby	3,347	6 11
Jackson, G., and Sons, Hull... ..	3,125	0 0
Grant, M., Cleethorpes	3,092	18 2
Thompson, T. M., and Sons, Louth	2,937	0 0
Vickers, J. H., Nottingham	2,708	0 0

* Accepted.

CORNHILLS (Northumberland).—Accepted for the erection of a farmhouse at Cornhills, Kirkwhelpington, for Mr. Thos. Thornton. Mr. George Reavell, architect, Alnwick:—

Martinson and Welton, Bellingham, Northumberland	£1,059	0 0
CROYDON.—For alterations and repairs to Dunmere, Sydenham-road, North. Mr. A. Broad, architect, 3, High-street, Croydon:—		
Bulled, E. P., and Co.	£644	0 0
Page, S.	557	0 0
Barker, D. W.	425	0 0
Hanscomb and Smith (accepted)	335	0 0

CULLOMPTON (Devon).—For the erection of a billiard-room at Dellford House, for Mr. Albert Abid, Messrs. Edward Ellis and Sons, surveyors, &c., Bedford Chambers, Exeter. Quantities by the surveyors:—

Nicks Bros.	£537	10 0
Phillips, Hy.	525	0 0
Stevens and Son, Exeter (accepted)	512	0 0
Williams	507	10 0

[Surveyor's estimate, £527 17s. 7d.]

DERBY.—Accepted for the erection of new works for Messrs. Bemrose and Sons, Limited, Derby. Mr. E. R. Ridgway, architect, Long Eaton:—

Ford and Co., Talbot-street, Derby	£10,559	0 0
Eastwood, Swinger, and Co., Derby	1,342	0 0
Abell, Wm., Book-street, Derby, ...	769	0 0
King, J., Ltd., Liverpool, heating	785	0 0
Ford and Co., Talbot-street, Derby, ...	693	0 0

DUNGLOE (Ireland).—Accepted for improvements to the Parish Church. Mr. E. J. Toye, architect, Strand, London-derry:—

McFadden, James, Letterkenny	£440	0 0
------------------------------------	------	-----

DUNSTON (Northumberland).—Accepted for alterations to Dunston Steads Farm-house and Farm-buildings, for Eyre's Trustees. Mr. George Reavell, jun., architect, Alnwick:—

Appleby, M., Embleton	£410	17 1
-----------------------------	------	------

GLOUCESTER.—For the construction of a reservoir, &c. (two contracts) for the Corporation. Mr. W. Fox, C.E., 5, Victoria-street, S.W.:—

Firbanks, J. H.	£15,280	0 0
Ring, Alfred	13,967	0 0
Lawson, Geo.	9,696	0 0
Law, Geo.	9,185	0 0
Shaddock, W. C.	9,120	0 0
Nott, L. P.	8,700	0 0
Jones, W.	8,023	0 0
Ambrose, S.	7,975	0 0
Bell, Geo.	7,149	0 0
Jones and Fitzmaurice	6,880	0 0
Brebner, R. C.	6,258	0 2
Cruwys and Hobrough, Gloucester*	6,176	1 0
Davis, T. J.	5,770	17 10
Ewart, J. A.	5,709	19 7

* Accepted.

ENFIELD.—For erecting a school building and appurtenances, Seventh-avenue, Bush-hill-park, Enfield, for the Enfield School Board. Mr. G. E. T. Laurence, architect 181, Queen Victoria-street, E.C.:—

Almond, A. F.	£10,628	0 0
Batley, Son and Holness	10,554	0 0
Knight and Son	10,442	0 0
Gray, Hill and Co.	9,999	0 0
Wall, C.	9,980	0 0
Patman, L. and W. H.	9,633	0 0
Hart, P.	9,594	0 0
White and Son	9,220	0 0
Fairhead and Son	9,214	0 0
Hunt, C. H.	9,090	0 0

FOLKESTONE.—For the erection of school (Science and Art), Grace-hill, for the Town Council. Mr. Frank Newman, architect, 4, Bouverie-square, Folkestone:—

Wallis G. E., and Sons	£7,725	0 0
Pelts J. Q., and Son	7,715	0 0
Stiff, Herbert	7,585	0 0
Denne G. H., and Son	7,580	0 0
Fearon, T. L.	7,500	0 0
Hayward and Paramor	7,270	0 0
Lewis G., and Sons	7,250	0 0
Hoad, H. W.	7,235	0 0
Moody, H. M., Folkestone*	6,524	0 0

* Accepted.

GLOUCESTER.—For the supply and delivery of 2,800 tons 14 in. c. i. socket pipes, &c., for the Corporation. Mr. Wm. Fox, C.E., 5, Victoria-street, S.W.:—

Jordan, Exors. of Chas.	£13,717	3 0
Oakes, J., and Co.	12,549	13 9
Macfarlane, Strong and Co.	12,316	9 11
Stewart, D. Y., and Co.	12,041	12 6
MacLaren and Co.	11,894	17 7
Spittle, T., and Co.	11,715	10 5
Staveley Coal and Iron Co.	11,481	0 0
Roberts, J. and S.	11,467	8 9
Peel, C. E. and H. M.	11,294	3 10
Stanton Iron Co.	11,010	5 0
Cochrane and Co., Dudley*	10,373	12 6

* Accepted.

GREAT YARMOUTH.—For alterations to school buildings, Fritton, for the Managers. Messrs. Bottle and Olley, architects, 5, Queen-street, Great Yarmouth. Quantities by architects:—

Bray, J. F. W.	£248	0 0
Lacey, H.	245	0 0
Davey, R.	245	0 0
Grimble, F.	232	0 0
Beech, G. W.	209	0 0
Cockrell, Bios., Gorleston (accepted)	200	10 6

GRIMSBY.—For the erection of three houses, Cressy and King Edward-streets:—

Ion and Lewis	£382	0 0
Cook	320	0 0
Thomas, J. A.	294	0 0
Walker	290	0 0
Emerson, W. H.	287	0 0
Dixon	281	0 0
Smith, G. and J.	280	0 0
Leaning, J., Grimsby (accepted)	270	0 0



BLACKMAN VENTILATING COMPANY, LTD.,

Engineers and Specialists in

VENTILATING AND WARMING

Public and Industrial Buildings, Schools, &c.

20,000 INSTALLATIONS OF MECHANICAL VENTILATION IN SUCCESSFUL USE

63, FORE STREET, LONDON, E.C., AND BRANCHES.

MANUFACTURERS OF

MANHOLE COVERS,

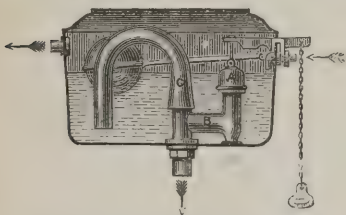
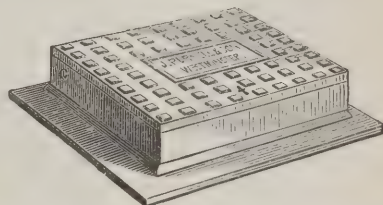
Air-Tight, Closed and Ventilating,

ALSO

Syphon Flushing Cisterns.

J. PURNELL & SON,

Vincent Row, Vincent Street, Westminster.



ROBT. ADAMS, 67, NEWINGTON CAUSEWAY, LONDON, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self
Compensating

SPRING HINGES

Guaranteed to
last longer and
work better than
any hitherto made.

CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to
and closes from
the angle of 135°

Fig. 3 is the new
Single Action
Spring. It opens to
and closes from
the angle of 180°
i.e., "wide back."

THE
FIRST SPRINGS
EVER PRODUCED
WITH
THESE GREAT
ADVANTAGES.

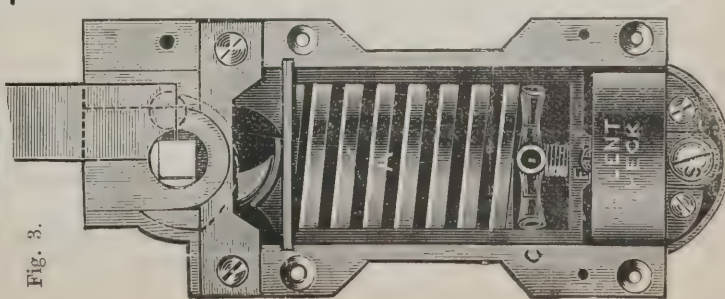
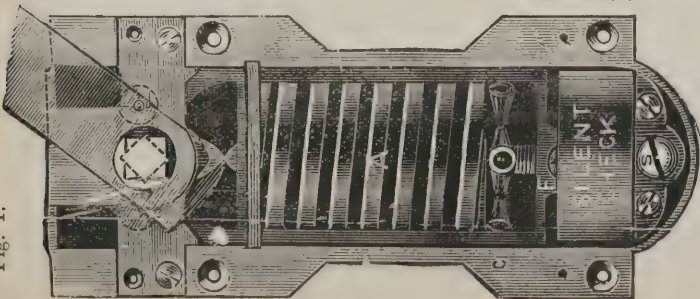


Fig. 1.

Fig. 3.

GREAT YARMOUTH.—For new residence for Mr. W. Palgrave Brown, Southtown. Messrs. B. O. and Olley, architects. Great Yarmouth. Quantities by architects:—

Hawes, G. E.	£1,859	0	0
Bray, J. F. W.	1,708	0	0
Carter and Wright	1,713	0	0
Ward, J.	1,690	0	0
Howes, T.	1,689	0	0
Lacey, H.	1,677	0	0
Balls, J.	1,661	0	0
Beech, G. W.	1,635	0	0
Flaxman, G. T.	1,605	0	0
Grimble, F.	1,588	0	0
Beckett, G., Great Yarmouth*	1,494	15	0

* Accepted.

HARTLEPOOL.—Accepted for the construction of sewer, &c., Hart-street, &c. (6 contracts), for the Corporation. Mr. H. C. Crummack, C.E., Borough Engineer, Hartlepool. Quantities by Engineer:—

Hart-road Sewer.	
Howe, Jos., and Co., West Hartlepool	£800 11 11
For Tar Paving on Town Moor.	
Asphaltic Limestone Concrete Co., Ltd., Birmingham	1s. 8d. per yard super.
Macadamising and Channelling Sea View Terrace.	
Curry, H. and Son, Hartlepool	£418 16 0
Flagging and Kerbing in Commercial-street.	
Marshall, R. J., Hartlepool	£58 3 8
Flagging Kerbing, and Channelling Cleveland-road (part).	
Marshall, R. J., Hartlepool	£393 4 9

HEREFORD.—For the erection of a memorial hall, and extension of dormitory, at the Working Boys' Industrial Home. Mr. G. H. Godsell, architect, Hereford. Quantities by Mr. Henry Smith:—

Beavan and Hodges	£1,793	0	0
Davis, James	1,758	10	0
Bowers W., and Co.	1,654	0	0
Lewis, W. P., and Co., Hereford*	1,650	0	0
Smith, David	1,606	18	9

For Further Dormitory Extensions.

Lewis, W. P., and Co.*	£310	0	0
------------------------	------	---	---

* Accepted.

HULL.—For the erection of St. Wilfrid's Church, The Boulevard, Hull. Messrs. Smith, Brodbrick and Lowther, architects, Hull. Quantities by Mr. J. Watson, Hull:—

Lyons, A.	£3,672	5	0
Blackburn, F., and Son	3,649	0	0
Goates, T.	3,605	0	0
Skinner	3,589	10	0
Southern, F.	3,583	0	0
Houlton, G.	3,595	0	0
Jackson, G., and Son	3,525	0	0
Robinson, D.	3,480	0	0
Drury, J.	3,478	0	0
Hall, F.	3,348	0	0
Colley and Levitt, Hull (accepted)	3,222	0	0

Quantities, &c., Electrographed

Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

HAVERFORDWEST.—For alterations, additions and decorations to the Salutation Hotel for Mr. Levi Harries, Mr. J. Preece James, architect, Haverfordwest:—

Reynolds, Alfred, Builder and Decorator (accepted).

HEREFORD.—For the erection of stables, for Messrs' Millar Bros. Mr. G. H. Godsell, architect, Hereford:—

Andrews, R., and Sons	£350	0	0
Davis, James	346	10	6
Wilkes, E. W. (accepted)	346	0	0

KILLARNEY (CO. KERRY).—Main Drainage Works. For the construction of 3,388 lin. yds. of pipe sewers, &c. Thos. Scott, C.E., of Killarney, engineer. Quantities by engineer:—

Gallivan and McIntosh, Killarney	£2,388	5	4
Driscoll, James, Glynn	2,185	17	2
Cressingham, John, Dublin	2,112	19	0
Warren, Michael, Killarney*	1,830	0	0
Pett, J. H., Blennerville	1,787	0	0

* Accepted.

LONDON.—For repairs, painting and sundry works to the offices of "The Daily Chronicle" in Fleet-street and Salisbury-court, E.C. Mr. Henry L. Florence, architect. Quantities by Mr. J. F. Bull:—

Charteris	£1,284	0	0
Colls and Sons	1,157	0	0
Worsley and Co.	1,147	0	0
Simpson and Son	1,144	0	0
Killby and Gayford	1,087	0	0
Cubitt, W. and Co. (accepted)	1,019	0	0

Exclusive of wall tiling, £186; and ventilation, £70.

LONDON.—For a covered stand dressing rooms, &c., in Palliser-road, West Kensington, W., for the Queen's Club, Limited. Mr. Alexander Payne, architect, Norfolk House, Victoria Embankment, W.C.:—

Ironwork.

Shaw, Matthew T., and Co.	£956	0	0
Young, H., and Co.	750	0	0
Moreland, Richard, and Son	750	0	0
St. Pancras Ironwork Co.	738	0	0
Drew, Bear, Perks and Co.*	617	1	0

* Accepted exclusive of carpenters' work.

LONDON.—For exterior painting, &c., of Netherwood-street Board School, for the School Board for London. Mr. T. J. Bailey, architect:—

Yerbury and Son	£218	0	0
Neal	198	0	0
Chappell	190	0	0
Callow	189	10	0
Salter	184	10	0
Chinchen	176	15	0
Cowley and Drake	158	6	3
Cruwys	156	0	0
Marchant and Hirst	149	0	0
Eady	147	5	8

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

LONDON.—For finishing and repairing No. 92, and premises in rear of Nos. 94 to 100, High-road, Balham, S.W., and sundry other works for Mr. F. H. Avres. Mr. John Groom, architect, No. 2, Broad-street Buildings, Liverpool-street, E.C. Quantities supplied by Mr. Henry Theobald, 48, Finsbury-pavement, E.C.:—

Mattock Bros.	£1,028	0	0
Holloway, H. L.	988	0	0
Stimson and Co.	980	0	0
Voller, F. (accepted)	890	0	0

LONDON.—For exterior painting, &c., at Pritchard's-road Board School, for the School Board for London. Mr. T. J. Bailey, architect:—

Craig	£245	0	0
Harvey	203	0	0
Unsigned	157	0	0
Silk and Son	137	0	0
White and Son	127	0	0
Marchant and Hirst	118	0	0
Harrison and Spooner	106	0	0

LONDON.—For the erection of new steam laundry and cottage, &c., at the infirmary, Bancroft-road, E., for the Guardians of Mile End Old Town, E. Mr. Charles F. Burden, architect, Bancroft-road, E. Quantities by Messrs. Steward and Hewish, 66, Victoria-street, S.W., and 412 Mile-end, E.:—

Contract No. 1.

Barker, Geo.	£7,642	0	0
Sherwin, H. H.	7,428	0	0
Gladding, W.	7,342	0	0
Peck, C.	7,339	0	0
White, T., and Son	7,249	0	0
Carter, H. J.	7,193	0	0
Wood, F. and F. J.	7,139	0	0
Kirk and Randall	7,062	0	0
Perry and Co.	6,827	0	0
Cooper, R. S.	6,574	0	0

Contract No. 2.—For the Supply and Erection of new Boilers and Machinery, &c.

Fraser, W. J., and Co.	£9,037	0	0
Thomas and Taylor	8,395	0	0
Manlove, Alliott and Co.	8,260	0	0
May, J. F., and Co.	7,213	0	0
Benham and Sons	7,204	0	0
Rosser and Russell	7,179	0	0
Richmond, J., & Co.	7,100	0	0
Hunter and English	6,942	0	0
Easton and Anderson	6,743	0	0

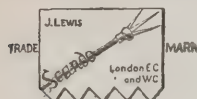
LONDON.—For alterations to Kilburn Town Hall for purposes of a new theatre. Messrs. Fowler and Hall, architects, 9, Serjeant's Inn, Fleet-street. No quantities supplied.

Jackson	£2,940	0	0
Hindle	2,324	0	0
Groome, J. P.	1,670	0	0

SPHINCTER WORKS,
EMERSON STREET, LONDON, S.E.

**High Grade Flexible Hoses for
Contractors, Engineers, Builders.**
FIRE HOSES & HYDRANTS.
HOSES FOR CLEANSING WITH WATER POWER.
Pumping, Suction, & Dredging Hoses.
Always specify "SPHINX" Brand.

TELEGRAMS—
"WEATHERVANE, LONDON."



J. LEWIS, 5 & 6, Winchester Street, LONDON, E.C.

LIGHTNING CONDUCTORS for

ELECTRICAL EXHIBITION CRYSTAL PALACE AWARD, 1892.

"LEWIS LINK," the only EFFICIENT COUPLING for Conductors. PATENT No. 16,641

**VILLAS,
MANSIONS,
SCHOOLS,
CHURCHES,
FACTORIES,
CHIMNEY SHAFTS,
&c.**



Established 1841.

THE OLDEST HOUSE IN THE TRADE.

Incorporated 1893.

Our Work has stood the test of time, and after years of wear, can be seen in all parts of the Country uninjured. We have laid more than THREE MILLION YARDS Super in the last Twenty Years.

W. B. WILKINSON & Co., Ltd., Concrete Workers.

[Wilkinson's Improved "Granite Concrete," or "Granolithic Paving.]"

Designers and Constructors of **Concrete Staircases and Fireproof Floors** of all descriptions, with as little Iron as possible; and that wholly in tension, thereby preventing waste.

Manufacturers of Light Tubular or Honeycomb Section **Concrete Partitions.**

Manufacturers of Wilkinson's "In Situ" **Granolithic Paving**, Grooved and Plain.

Manufacturers of the very durable **2in. "Foothold Flags,"** made all sizes, for Street and other Pavements, the Cheapest in the market.

Head Office:
Newcastle-on-Tyne.

Works:
Newcastle-on-Tyne.
Greenhithe, Kent.

London Manager:
Mr. FRANK PECK
15, Great George Street, Westminster, S.W.

LONDON.—For the erection of a warehouse on the site of Nos. 39 and 41, Worship-street, E.C., for Mr. A. Berliner. Mr. John Groom, architect, No. 2, Broad-street-buildings, Liverpool-street, E.C. Quantities supplied by Mr. Henry Theobald, No. 48, Finsbury-pavement, E.C. :—

Simpson and Co.	£1,200	0	0
Nightingale, B. E.	3,077	0	0
Kilby and Gayford	3,060	0	0
Holloway, H. L.	3,000	0	0
Patman and Fotheringham	2,936	0	0
Mattock Bros. (accepted)	2,888	0	0

LONDON.—For building bachelors' chambers and club-house, St. James's. Messrs. Fowler and Hall, architects, 9, Serjeant's Inn, Fleet-street :—

Groom, J. P. £15,000 0 0

LONDON.—For exterior painting, &c., at Lant-street-road Board School, for the School Board for London. Mr. T. J. Bailey, architect :—

Lathes Bros.	£159	0	0
Gurling	132	0	0
Dove Bros.	130	0	0
Leeks and Hooker	124	10	0
Nightingale	98	0	0
Johnson and Co.	92	8	4
Mid-Kent Building Co.	89	0	0
Marchant and Hirst	81	0	0

LONDON.—For exterior painting, &c., at Graystock-place Board School, for the School Board for London. Mr. T. J. Bailey, architect :—

Harrison and Spooner	£127	0	0
Willmot and Son	125	0	0
Dove Bros.	121	0	0
Marchant and Hirst	114	19	0
Johnson and Co.	112	5	0
Hornett (accepted)	99	0	0
Craig	92	15	0
Rowe, G. H.	67	10	0

LONDON.—For exterior painting, &c., of Canal-road Board School, for the School Board for London. Mr. T. J. Bailey, architect :—

Craig	£229	0	0
Dove Bros.	164	0	0
Corfield	135	0	0
Gavin Bros.	126	12	8
Stevens, Bros.	121	10	0
Grover and Son	118	0	0
Staines and Son	108	0	0
Marchant and Hirst	99	0	0

LONDON.—For additions, &c., to St. Eugene's Schools, Rosemont. Mr. E. J. Toye, architect, Strand, Londonderry :—

McClelland and Co.	£425	0	0
Maultsaid, W. J.	355	0	0
Colhoun, R.	345	0	0
Gillespie, D. (accepted)	312	0	0

[All of Derry].

LONG EATON (Notts).—Accepted for the erection of four-teen houses, Oak Leys and Co-operative-streets (two contracts) for the Working Men's Co-operative Society, Limited. Mr. E. R. Ridgway, architect, Main-street, Long Eaton :—

Bull, J., Long Eaton, Nottingham... ..	£2,297	0	0
--	--------	---	---

LONGTOWN (Herefordshire).—Accepted for alterations and additions to class-room, Longtown Schools. Mr. G. H. Godsell, architect, Hereford :—

Pritchard	£100	0	0
------------------	------	---	---

MILFORD HAVEN.—For building minister's residence for the Wesleyan Trustees. M. J. Preece James, architect, Haverfordwest :—

Phelps and Owens	£537	0	0
Cole, G., and Sons	495	0	0
Williams, Jas.	486	0	0
Thomas and Adams (accepted)	480	0	0

[All of Milford Haven.]

NEWPORT (Mon.).—For the erection of new Presbyterian church, Caerleon-road, Newport. Messrs. Wm. Graham, Hitchcock and Co., architects, Newport :—

Linton, J.	£2,799	0	0
Diamond, F. G.	2,750	0	0
Jones and Son	2,747	0	0
Locke, C.	2,695	0	0
Bambury	2,685	0	0
Hughes	2,667	0	0
Linton, W. A.	2,663	0	0
Hazell, A.	2,647	0	0
Jenkins	2,630	0	0
Parfitt, Dyson	2,525	0	0
Parfitt, A. E.	2,499	0	0
Pugh	2,485	0	0
Morgan, A. S., and Co. (accepted)... ..	2,400	0	0
Prosser, T.	2,100	0	0

[All of Newport.]

NEWPORT (Mon.).—For the erection of schools, Maindee, for the Rev. M. Bailey. Mr. F. R. Bates, 4, Commercial-street, Newport, architect :—

Lock, Charles	£2,250	0	0
Richards, Edwyn	2,219	0	0
Price, Wm.	2,175	0	0
Wilkins, Chas.	2,158	0	0
Linton, W. A.	2,140	0	0
Morgan, A. S.	2,099	0	0
Monks, J., and Co.	2,067	0	0
Parfitt, Dyson (accepted)	1,994	0	0

[All of Newport.]

OSWESTRY.—For the erection of six houses and stables, Chapel-street, Oswestry. Frank H. Shaylor, architect, Oswestry and Welshpool. Quantities by architect :—

Vaughan, Oswestry	£2,400	0	0
Southern, Shrewsbury	2,285	18	0
Evans and Felton, Oswestry	2,132	16	0
Thomas, W. H., Oswestry	2,024	10	0

WM. CLOWES & SONS, LIMITED,

Law Publishers & Booksellers,

27, FLEET STREET, LONDON, E.C.

Just published, royal 12mo, cloth, 12s. 6d.

THE LONDON BUILDING ACT, 1894. With Notes and Cross References and an Appendix containing such existing Statutes as still affect Building Operations within the Administrative County of London; also the Bye-Laws, Regulations and Orders of the London County Council and of the Commissioners of Sewers of the City of London. By W. RUSSELL GRIFFITHS, LL.B., of the Inner Temple and Midland Circuit, Editor of "The Statutes Regulating London Building," and FRANCIS W. PEMBER, M.A., of Lincoln's Inn, Draftsman of the Bill as originally introduced into the House of Commons.

Now ready, Second Edition, royal 8vo, 1,100 pp., cloth, 25s.

THE PRINCIPLES OF RATING as applied to railways, Docks, Tramways, Gas and Water Works, Coal and other Mines, Electric Lighting Works, Manufactories, and other Hereditaments. With a complete Digest of Cases and all the important Statutes dealing with Local Rating. By EDWARD BOYLE, of the Inner Temple, Barrister-at-Law, and G. HUMPHREYS-DAVIES, Fellow of the Surveyors' Institution, &c.

Demy 8vo, cloth, 10s. 6d.

TENEMENT HOUSES and FLATS (The Law relating to), for residential or business purposes, including the Taxation and Rating thereof. With an Appendix of Precedents, Leases, Forms, and a Digest of Cases relating to the Inhabited House Duty. By Walter Clode, Barrister-at-Law, of the Inner Temple, Associate of the Surveyors' Institution, &c.

"Mr. Clode's work is the first of its kind, and contains a very large amount of information arranged in a thoroughly practical and most useful way."—*Daily Chronicle*.

"Mr. Clode's work will be a welcome addition to the Architect, Surveyor, and Estate Agent's legal library."—*Building News*.

Demy 8vo., cloth 20s.

THE LAW OF NUISANCES. With Statutory Appendix. By E. W. Garrett, M.A., of the Inner Temple and Midland Circuit, Barrister-at-law.

"Every matter that, in the eyes of the law, is regarded as a nuisance is considered. . . . While the work appeals more particularly to members of the legal profession, 'The Law of Nuisances,' there can be no question, will be found very useful by the general public, especially by officials of County Councils, Vestries and Corporations."—*City Press*

Demy 8vo., 930 pages, cloth 32s.

THE LAW AND PRACTICE OF COMPENSATION for Taking or Injuring Affecting Lands under the Lands Clauses Consolidation Acts, 1845, 1860, and 1869; Railway Clauses Consolidation Act, 1845; Artisans' and Labourers' Dwellings Improvement Acts, 1868 to 1882; Public Health Act, 1875; Elementary Education Act, 1870; General Metropolitan Paving Act; and other Public Acts (English, Irish and Scotch). With an Introduction, Notes and Forms. By the late Sidney Woolf, Q.C., and James W. Middleton, of Lincoln's Inn, Barrister-at-Law.

"The book is a most complete one on its subject, and may fairly claim to be an indispensable guide book for the compensation lawyer."—*Law Journal*.

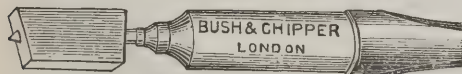
LONDON: WM. CLOWES & SONS, LIMITED,
27 FLEET STREET, E.C.

HARMER & HARLEY,

GENERAL PRINTING CONTRACTORS,

56, Coleman Street, E.C.

GLAZIERS' DIAMONDS.



ILLUSTRATED PRICE LIST ON APPLICATION.

BUSH & CHIPPER,

9, Percival St., Goswell Rd., E.C.

ESTABLISHED 20 YEARS.

PILKINGTON'S

WORKS:

TILES.

CLIFTON JUNCTION,
NEAR MANCHESTER.

MANUFACTURERS OF HIGH CLASS TILES
For Floors, Walls, Hearths, Grates and Furniture
EVERY VARIETY OF TILE WORK FOR
CHURCHES, PUBLIC BUILDINGS AND
PRIVATE RESIDENCES.

London Show Rooms:

LYRIC CHAMBERS, 45, WHITCOMBE STREET, W.C.

Manchester Show Rooms:

29, PRINCESS STREET, ALBERT SQUARE.

COX, SONS, BUCKLEY & Co.,

ART WORKERS IN

Wood, Stone, Metals, Embroidery and
Stained Glass,

18, TAVISTOCK STREET, COVENT GARDEN,

CATALOGUES FREE UPON APPLICATION.

BRASS EAGLE LECTERNS from £24.

FOUNDED 1837.

ROBSON'S PATENT VENTILATOR

For extracting impure air from Dwelling
Rooms, Libraries, Offices, &c.

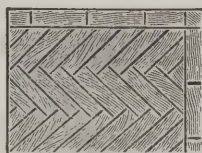
Chambers's Journal, December, 1894, page 829, says:—
"This method of ventilating dwelling rooms appears to us to meet every requirement."

ROBSON & Co.,

44, Hendon Road, Sunderland.

Agents Wanted.

WOOD-BLOCK PAVING.



(Mr. WHITE'S SYSTEM).

For Churches, Schools,
Offices, &c.

Estimates and full particulars
on application to

THOS. GREGORY & Co.

WOOD PAVING AND STEAM
JOINERY WORKS,

Clapham Junction, S.W.

Jarrahdale

BEST WOOD FOR PAVING

Jarrahdale,

DURABLE

Antiseptic and almost Non-Absorbent.

Owing to the unprecedented demand for Jarrahdale, we are booking Orders for next Season's Delivery.

WELL ADAPTED FOR BUILDING PURPOSES & PIER & HARBOUR WORKS.

The Rockingham Railway and Jarrahdale Timber Company, Limited.

McLEAN BROS. & RIGG, Ltd., Sole Agents, 9 & 11, Fenchurch Avenue, London, E.C.

CONTRACTS OPEN.

TO BUILDERS.

The Commissioners of Her Majesty's Works, and PUBLIC BUILDINGS, are prepared to receive TENDERS for the ERECTION of a NEW CROWN POST OFFICE at Newbury.

Drawings, specification, and a copy of the conditions and form of contract may be seen on application to the Postmaster. Bills of quantities have been prepared for the use of the builders by Messrs. KARSLAKE and MORTIMORE, of Old Queen Street, Westminster, and, together with forms of Tender, may be obtained at H.M. Office of Works on payment of one Guinea. The sums so paid will be returned to those persons who send in Tenders in conformity with the conditions specified below.

The Commissioners do not hold themselves responsible for the accuracy of the quantities, nor do they bind themselves to accept the lowest or any Tender.

Tenders are to be delivered before TWELVE o'clock noon, on TUESDAY, the 2nd of July, addressed to the Secretary, H.M. Office of Works, &c., 12, Whitehall Place, London, S.W., and endorsed "Tender for Newbury Post Office."

REGINALD B. BRETT,

H.M. Office of Works, &c., Secretary.
June 5th, 1895.

HANWELL URBAN DISTRICT COUNCIL.

CONTRACT FOR BROKEN GRANITE.

The Council are prepared to receive TENDERS for the SUPPLY of BROKEN GUERNSEY or CHANNEL ISLANDS GRANITE for the year ending 31st MARCH, 1895, to be delivered free at any place on the roads within their district, i.e., the Parish of Hanwell.

Forms of Tender (on which alone Tenders will be received) contract and sureties, bond, can be inspected at the Council's Offices any day between the hours of TEN a.m. and TWELVE a.m. on TUESDAY.

Tenders sealed, and endorsed "Tender for Broken Granite," to be sent in to me, at the Offices of the Council, not later than MONDAY, the 1st day of JULY, 1895.

The Council do not bind themselves to accept the lowest or any Tender.

Dated the 13th day of June, 1895.

By order,

WARREN S. JAMES,

Clerk to the Council.

Urban District Council Offices,
Hanwell, W.

SHOP PROPERTY.

A BATCH of SHOP PROPERTY, splendidly situate, and let, in the Lewisham High Road. Designed and built from the designs and under the constructional superintendence of an Architect. The property is in splendid repair and shows a nett income of £400 per annum.—Price, and all details from Mr. DUDLEY MORGAN, Talbot House, Arundel-street, Strand.

HOLIDAY SKETCHING TOURS.—

Belgium and Normandy alternately every fortnight. Cost 6½ guineas for each tour of one week's duration. Start Saturdays, entries close previous Wednesdays. Detailed particulars of G. A. T. MIDDLETON, 56, Dafforne-road, S.W.

QUANTITIES, &c., ELECTROGRAPHED

(equal to Lithography and much cheaper) or LITHOGRAPHED at moderate rates. Skilled staff. "Quantities" Box, 14 in. by 9 in. by 5 in., 2s. 6d. each; six for 12s. Plans copied, enlarged, reduced, coloured.—W. HARDAKER, 15, Farnival-street, Holborn, London, E.C.

QUANTITIES PREPARED with

accuracy and despatch by experienced Surveyor. Terms strictly moderate. SURVEYOR, 92, FLEET STREET, E.C.

READERS OF THIS JOURNAL who

contemplate PATENTING ANY INVENTION can have an expert's opinion upon the merits of the invention, or advice how to proceed to get the matter patented, by sending full particulars to Mr. PHIPPS, Magdalen-road, Norwich.

R.I.B.A. EXAMS. PREPARATION

personally or by correspondence. High places secured at all the Exams. Any subject taken separately.—Full particulars on application to W. CHURCH HOWGATE, A.R.I.B.A., 21, Parliament-street, Westminster, S.W.

APPOINTMENTS VACANT.

ARCHITECT'S JUNIOR ASSISTANT

WANTED. Well up in quantities and working drawings. State age and salary required.—Apply G. OSBORNE WILLIAMS, Architect, 70, Victoria-street, Liverpool.

A GENTLEMAN with a thorough practical

knowledge of sanitary and hot-water work, house decorating, book-keeping, &c., would be glad to entertain the TAKING OVER of a sound BUSINESS.—Apply, with particulars, N., 3, Imperial-buildings, East Croydon.

BUILDER'S CLERK WANTED.

Must be energetic, thoroughly reliable with accounts, prime cost, and the usual routine. References from past or present employers. Apply by letter, A. A. W., 47, Mortimer-street.

COUNTY BOROUGH of BIRKENHEAD.

BIRKENHEAD CORPORATION ELECTRICAL CITY SUPPLY.

TO BUILDERS AND CONTRACTORS.

ELECTRICAL GENERATING STATION BUILDINGS.

The Corporation of Birkenhead are prepared to receive TENDERS for the ERECTION and COMPLETION of the ENGINE and BOILER HOUSE, and other Buildings, Walls, &c. (the chimney excepted), in connexion with the proposed Electrical Generating Station at Bentinck Street, Birkenhead.

Plans, specifications, and particulars, with the form of contract, can be seen, and (upon deposit of the sum of Two Guineas, which will be repaid upon receipt by the Corporation of a bona-fide Tender) bills of quantities with form of Tender can be obtained, on application at the Town Clerk's Office, Town Hall, Birkenhead, or at the office of Mr. JAMES N. SHOOBRED, Mem. Inst. C.E. Albany Buildings, No. 47, Victoria Street, London, S.W., on and after MONDAY, the 17th JUNE instant.

The Corporation do not bind themselves to accept the lowest or any Tender.

Tenders, which must be on the prescribed form, sealed and endorsed "Tender for Electrical Generating Station," must reach me not later than TWELVE o'clock at noon, on THURSDAY, the 27th JUNE, 1895.

By order,

Town Hall, Birkenhead, ALFRED GILL,
June 8th, 1895. Town Clerk.

NEW SHOREHAM SCHOOL BOARD, SUSSEX.

TO BUILDERS.

The Board hereby invite TENDERS from responsible and competent Builders willing to enter into a Contract and Bond to execute certain WORKS of ADDITIONS to the Shoreham Board Schools.

Bills of quantities, with form of Tender, may be obtained on payment of One Guinea (which will be returned on receipt of a bona-fide Tender) of the Architects to the Board, Messrs. LOADER & LONG, No. 54, Old Steine, Brighton at whose Offices the drawings and specification may be inspected.

Sealed Tenders, addressed to the Architects, and endorsed "Tender for Alterations to the Shoreham Board Schools," must be delivered at their Offices before TWELVE o'clock noon on MONDAY, JULY 1st, 1895.

The Board does not bind itself to accept the lowest or any Tender.

By order,

H. STOVOLD BRIGDEN,
Clerk to the New Shoreham School Board,
Church-street, New Shoreham.
June 11th, 1895.

CITY of CARLISLE SCHOOL BOARD.

WANTED a CLERK of WORKS for a New Board School in Carlisle. Must be thoroughly experienced and prepared to undertake superintendence of works whenever in operation.

The execution of the work is estimated to occupy about ten months.

Applications stating age, salary required, and full particulars of qualifications, with copies of not less than three recent testimonials, to be sent not later than TUESDAY, the 25th inst. to S. CARTMELL, Clerk to the Board, 27, Lowther-street, Carlisle.

11th June, 1895.

CITY of BIRMINGHAM.

The Improvement Committee of the Birmingham City Council REQUIRE the SERVICES of a gentleman having a knowledge of architecture and surveying, as MANAGER of the properties on the Improvement Scheme area.

The salary will be £300 per annum, with no pension.

Applications, stating age (which must not exceed 35 years), qualifications, and nature of past employments, to be addressed to "The Chairman of the Improvement Committee, Council House, Birmingham," and sent in not later than 1st JULY.

Canvassing members of the committee will be held to be a disqualification.

EDWARD ORFORD SMITH,

Birmingham, Town Clerk.
June, 1895.

GENERAL FOREMAN seeks RE-ENGAGEMENT.

Practical in all branches, with a view of partnership. Could invest £100 to £200 in same. References exchanged.—Z.Y.X., care of 88, Shirland-road, Maida Vale.

PLUMBERS and DECORATORS.—

WANTED, a WORKING MANAGER for the above; also to superintend a farrier's and a mineral water business. Must be used to bookkeeping and estimating. Countryman preferred. Write, stating age, salary (which must be moderate), experience, and reference.—KNIGHT, Tring.

APPOINTMENTS WANTED.

ADVERTISER (30) with 16 years' London experience; several years managing a West-end Builders, House Agents, and Surveyor's Business, wishes for a SITUATION in town or country, where his all-round knowledge will be required. Competent to make reports and superintend work, especially sanitation. Surveyor's office preferred.—"W.M.," c/o Smith's Advertising Bureau, 51, Morgate-street, E.C.

ADVERTISER desires ENGAGEMENT as

improver in architect's office. Fair draughtsman, neat tracer. Small salary required.—P. W. M., 2, Lincoln-villas, Willesden-lane, N.W.

ARCHITECT'S ASSISTANT requires RE-

ENGAGEMENT. Working and detail drawings. Specifications and quantities. Good references.—"S.," 8, Victoria-street, Shrewsbury.

TO PAINTERS AND BUILDERS.

The Board of Management of the South Metropolitan School District are prepared to receive TENDERS for REPAIRING and PAINTING the whole of the EXTERIOR PORTION of their CONVALESCENT ESTABLISHMENT situated at Herne Bay in the county of Kent.

Persons desirous of Tendering can, upon application to Mr. OWEN, Superintendent of the School, between the 17th and the 22nd instant (both inclusive) obtain a copy of the specification and form of Tender upon payment of the sum of Ten Shillings, which will be returned upon receipt of a bona-fide Tender.

A copy of the contract and bond to be entered into can also be seen at the School.

Sealed Tenders, addressed to the Board of Management of the South Metropolitan School District, Brighton-road, Sutton, Surrey, and endorsed "Tender for Repairing and Painting Herne Bay School," to be delivered not later than MONDAY, the 1st day of JULY, 1895.

Tenders will be opened on the following day, and the person whose Tender is accepted will be immediately informed of such acceptance.

The contractor will be required to enter into a contract and to find satisfactory security for the due performance thereof.

The Managers do not bind themselves to accept the lowest or any other Tender.

By order, HENRY BURGESS,

Clerk's Office, Clerk to the Managers.
South Metropolitan District School,
Brighton-road, Sutton, Surrey,
June 8th, 1895.

THE HACKNEY VESTRY.

TO GRANITE MERCHANTS.

TENDERS are invited for the SUPPLY and DELIVERY of GRANITE SPALLS and BROKEN GRANITE.

Specifications and forms may be obtained from Mr. JAMES LOVEGROVE, Chief Surveyor to the Vestry.

The contractor whose Tender may be accepted will be required to pay wages at rates not less, and to observe hours of labour not greater, than the rates and hours set out in the Vestry's Schedule, and such Schedule will form part of the contract, and penalties will be enforced for any breach thereof.

Tenders, sealed and endorsed, to be delivered at the Town Hall, Hackney, not later than FIVE p.m. on WEDNESDAY, the 26th inst.

The Vestry does not bind itself to accept the lowest or any Tender.

By order, GEORGE GROCOTT,
Town Hall, Hackney, Clerk.
June, 1895.

ARCHITECT'S ASSISTANT (an archi-

tect's son) desires immediate ENGAGEMENT. Thirteen years' City experience. Good references. Good all-round man. Salary £2 2s.—A. G., 166, Aldcroft-road, Haverstock Hill.

ARCHITECT and Surveyor's ASSISTANT

desires ENGAGEMENT, London. Sixteen years' experience in all branches of architectural profession. Efficient surveyor and leveller. Testimonials—"Rosebank," Lansdowne-road, Tottenham.

ARCHITECT and SURVEYOR'S General

ASSISTANT requires RE-ENGAGEMENT. Eight years' London experience in all branches. Plans, surveys, quantities, specifications, &c., and usual routine.—SURVEYOR, care of Messrs. Deacon's, Leadenhall-street, E.C.

ARCHITECTURAL DRAUGHTSMAN

(good) DISENGAGED. Dilapidations, land surveying, levelling, laying out estates, or Clerk of Works, Management of house property.—H. M., 62, Kelmescott-road, Wandsworth Common, London.

ARCHITECT'S ASSISTANT and ENGI-

NEER'S TRACER desires ENGAGEMENT. Neat Draughtsman, working drawings, details, quick and rapid tracer, good colourist, general office routine, &c.—T. R. F., "Montrose," Glynfield-road, Harlesden, N.W.

BUILDERS, HOUSE AGENTS, and SUR-

VEYORS. Advertiser wishes DAILY EMPLOYMENT in superintending work or accounts. Moderate terms. Special knowledge of sanitary work.—Write, HEATHER, 200, Buckingham Palace-road, S.W.

BUILDER'S CLERK. Aged 29. Expe-

rienced in book-keeping. P. C. Correspondence, measuring up and preparing accounts, &c. Fair estimator and draughtsman. Good references.—G. L., 8, Shore-road, South Hackney, N.E.

DESIGNS, Workings, Drawings, Details,

Tracings, Specifications from rough instructions. Low Terms. Perspectives artistically coloured from half-a-guinea. Shortest notice.—"Y," Advertiser Office, Croydon.

PRACTICAL MAN, wants SITUATION as

MANAGER of ESTATE, near London preferred, but would not object to country. Holder of Sanitary Inspectors Certificate, and two Science and Art Certificates for building construction. Excellent Testimonials. Thoroughly understands plans, &c., having carried out large contracts in London and Country. Good at figures and accounts.—Address, "SURVEYOR," 1, Grafton-road, Goldsmith-avenue, East Acton, London, W.

JUNIOR ASSISTANT requires SITUATION

in architect and surveyor's office. Five years general experience. Good draughtsman, tracer, colourist, &c. Perspective, details, and general office routine.—Apply, H. S., No. 8, Higher-terrace, Torquay.

The Builders' Journal.

Vol. I., No. 20.

Tues., June 25, 1895.

ILLUSTRATIONS.

The Mantel in the Dining Room of Boveney Court : William Young, Architect 305	Silver Altar Plate : Designed by Edwin T. Hall 311
Tower of the People's Palace : By E. R. Robson .. 307	" Ivy Hatch," Ightham, Kent : By Edwin T. Hall.. 312
The Blind Institute, Deansgate, Manchester : Charles Heathcote, F.R.I.B.A., Architect 309	A Sketch Study for Design : By Edwin T. Hall.... 313
The Font, Emanuel Church, West Dulwich : By Edwin T. Hall 311	An Interior of " Ivy Hatch " 313
	St. Ermin's Mansions : Edwin T. Hall, Architect .. 315
	Our Swimming Bath Competition : Design by " Myron " 319

CONTENTS.

Beauty of London 305	A Great Conqueror's Tomb..... 314	Trains to Pass Over Each Other 316
An Engineering Accomplishment 305	Metal in Roman Buildings 314	Professional Items..... 317
Enlargement of Westminster Abbey 306	" Present-Able " Architecture..... 314	The Architecture of Manchester 318
Colours Employed by the Ancients 306	Another Electric Railway 314	Islay Stones and Crosses..... 318
Darenth and its Roman Remains..... 307	Early Railway Reminiscences 316	The Coventry Competition 319
Bricks and Mortar 308	Magnitude in Architecture 316	Society Meetings 320
Men who Build, No. 18.—Mr. Edwin T. Hall 312	The Charterhouse..... 316	Trade and Commerce 320

The Beauty of London.

An infatuated writer, in a Northern contemporary, blinded by the glamour of the London season, or the aspect of the Thames Embankment when the sun is pouring through the tender green of the plane trees, has gone mad—not an unusual occurrence with newspaper men when they come to touch upon subjects they do not understand. He calls London the finest and most beautiful city in the World, comparing it immeasurably ahead of the cities of Italy, or the finest modern creations of other European lands. Men do not know their London even if they love it, or the wildest stretch of imagination could not conjure up the Beautiful in its narrow streets and feet-trodden highways. The greatest lack our buildings show is undoubtedly the lack of colour. It seems an extraordinary anomaly, but without colour very few things would be beautiful. Colour may be bright and happy, such as Mr. Waterhouse invariably gives us. What could be better than St. Paul's School at Hammersmith, or that incomparable building, the Natural History Museum, at South Kensington. On the other hand, we can have extremely fine colour in the deep greys of an old fine stone front, mellowed by age and not by soot. Worse colouring than the Constitutional Club in Northumberland Avenue cannot be found in the whole of London ; it is as vile in its way as the yellow faience of two eating-houses recently erected in the Strand, and little better than the crude browns of Frascati's Restaurant in Oxford Street. Mr. Halsey Ricardo's much-debated Front in Great George Street is an instance of good colouring. So is Colcutt's City Bank on Ludgate Hill—in cool greys—and the fine buildings modest John Dunn is erecting on the Norfolk Estate, adjoining the Temple. There is a wonderful future for glazed bricks and faience work in the London streets, however shocking, at

first blush, it may appear to be. But it is not colour alone that makes things pleasant to the eye of man. It is good proportion and sensibility of treatment, even the appropriateness of a design, which makes a build-

duality. The way to make a city hideous is to put four such erections as the Medical Examination Hall, the Savoy Hotel, " Balfour's Folly," and the Adelphi Terrace adjoining one another. And yet there they are gaping or blinking at the New Zealander as he saunters along the gardens at their feet, wondering which he shall admire or which spit at. We do not need to be told that nothing can prevent these things. We know it ; nothing material can, until Architects and the Institute obtain the recognition we crave for them, the recognition which is the birthright of a noble Art. That there are beautiful spots amidst the dreariness of our conquering City, we admit with pride. It is the satisfaction of our hearts ; but what is most cruel is the knowledge that these spots are obliterated as the years go on, and in their places the King of Commerce, defiant and debased, rears his ungodly head high up above the pavements which have been shadowed by nobler if less mighty things. Our Northern contemporary was wrong in deeming London beautiful. The writer was impressed by the glamour of the season, the historic renown, the richness of our commonwealth, and through his impression he thought he could detect beauty. It is almost cruel to disabuse him of his belief.

An Engineering Accomplishment.

REGARDED as an engineering feat greater things have been done than the Baltic Ship Canal, but in the sense of Imperial display the remarkable function of last week may be described as unparalleled in the history of the century. The German Emperor knows full well how to trick the elements—even appropriate thunder "clapped" applause!—and as he stood on the bridge of the *Hohenzollern* we may take it that he was a proud man. Questions of diplomacy and politics, with which we have nothing to do,



THE MANTEL IN THE DINING ROOM OF BOVENY COURT :
WILLIAM YOUNG, ARCHITECT.

ding, or a street, or a city beautiful ; and there are very few instances of these things in dear old dirty London. It is the unanimity of intention which is missing, the strong desire to improve the situation rather than to establish one's own striking indivi-

German Emperor knows full well how to trick the elements—even appropriate thunder "clapped" applause!—and as he stood on the bridge of the *Hohenzollern* we may take it that he was a proud man. Questions of diplomacy and politics, with which we have nothing to do,

got mixed with the cannonading, but considering the complexity of interests in Kiel Harbour, the affair passed off fairly well, and the French maintained their reputation as the Grand Nation. Singularly few were the engineering obstacles encountered in the sixty-four miles of the Canal; and the absence of locks, save at each end of the Canal, will indubitably aid the transit of ships along its course. The gain to Hamburg, Bremerhaven, Rotterdam, London, and Hull, varies from forty-four hours to fifteen hours. That the Canal is open to through traffic, not ending in a *cul de sac* as in the Manchester Ship Canal, should ensure an ultimate financial success to the Great Baltic Scheme. Furthermore, and apart from the commercial aspects of the undertaking, it may be maintained without exaggeration that, in virtue of the rapid and secured union of the Baltic and North Sea Fleets which it renders possible, the Canal doubles the capability of the German Navy. Against an attack by land, on the other hand, the Canal may be regarded as safe, on account of the difficulty of landing a large body of troops under the guns of the fortifications, and because of the constant readiness of strong land forces of the second line. In case of a coalition war, it secures to the German Navy the important advantages of the inner line. A circumstance which very considerably increases the value of the Canal is the position of the two German naval ports on the North Sea and the Baltic, which are brought considerably nearer one another by it, and enabled to support each other more easily. This consideration was of weight in determining the mouths of the Canal. The naval depôts, wharfs, and building and equipping docks are at Kiel, near the eastern end of the Canal, and there is no harbour in the Baltic so landlocked as that of Kiel, from which an enemy must keep at a respectful distance to avoid the risk of being attacked in the rear. The town of Brunsbüttel, at the western mouth of the Canal, is so situated that the ships of the Navy can pass unseen by an enemy between Wilhelmshaven and Kiel Harbour by a way avoiding the open sea as much as possible. The military advantages offered by the new waterway are also enhanced by the circumstance that Heligoland now belongs to Germany. That Island and the Canal form two mutually supplementary strategic positions. It would seem that Imperial rather than Commercial considerations have been the chief factor in urging the completion of this great engineering task.

A START has been made with proposed Co-operative Stores at Brotton, Yorks. Tenders, £1,128 10s. 4d. (not including fittings). Arthur Newsome, Architect, Middlesbro'-on-Tees.

DURING a brief but rather severe thunderstorm which passed over the Lochaber district on Thursday afternoon, a flash of lightning entered the Observatory on the summit of Ben Nevis, fusing the telegraph wire, and damaging an instrument at a point where the wire was exposed. The wooden lining of the Observatory caught fire, and for a time it was feared that the flames might spread and cause considerable damage, as the building is also lined with dry felt. Fortunately, the Observers, assisted by two visitors, who happened to be on the summit, succeeded in extinguishing the flames before very material damage resulted.

LIGHTNING conductors, according to Professor V. Jones, may become a source of danger instead of protection, especially when the continuity of the conductor has been severed. A great source of danger exists in an inefficient earth connection.

A NEW Masonic Hall is to be erected at Gourrock, in John Street, opposite the Central School. The probable cost of the feu and erection is expected to amount to about £1,000. The Hall will accommodate from 300 to 400 people.

ENLARGEMENT OF WESTMINSTER ABBEY.

SHOULD THE NATION PAY?

IN Old Palace Yard, Westminster, to the north-east of the main structure, stands a group of very old houses. As relics of a bye-gone age these buildings are interesting, and have their value in the eyes of the antiquarian, but their proximity to the Abbey itself is a source of danger owing to their liability to fire. It is quite possible that these houses might have been jealously preserved had they been situated elsewhere, but standing where they do their value becomes comparative, and, of course, they are a mere bagatelle when weighed in the balance with the venerable fane which holds the memorials of England's illustrious dead. And not only is the preservation of these dilapidated houses to be deprecated from a fire-risk standpoint, but as long as they remain where they are they will obstruct the view of the fine Architecture of Henry VII.'s Chapel, and of the ancient Chapter House. To the majority of Englishmen the idea of regarding Westminster Abbey as a mere "show place" is probably repugnant; but, nevertheless, there is no reason why the impressive outlines of the Abbey should not be displayed to the best possible advantage. There is, therefore, not the slightest justification for concealing a beautifully moulded portion of the edifice behind a facade of masonry of very subsidiary historical value, apart from the weighty consideration of safety; and it has been decreed that the tumble-down houses shall be demolished. The announcement is entirely in accordance with the strong recommendations submitted to Parliament by the Royal Commission, which reported as long ago as 1891. The Ecclesiastical Commissioners own the freehold, and all the leaseholders have been persuaded to agree to the scheme of demolition, which will be carried into effect as soon as Parliament is prorogued. The clearance to be thus effected will constitute but one portion of a scheme affecting the future of Westminster Abbey. For years it has been apparent that if the Abbey were to continue to be the depository of the remains of illustrious Englishmen, or of their cenotaphs or Monuments, the provision of more space would become an imperative necessity. Several years have elapsed since Dean Stanley reported that there remained but two spots available for Statues of men of the greatest eminence. In later years, no doubt, the honour of interment in Westminster Abbey has been much more sparingly conferred than it formerly was—not, perhaps, because there are fewer great men in modern times, but because we have become much more exacting in the matter of qualification. Scores of Tablets and other Memorials have been erected in Westminster Abbey to persons who were little more than mediocrities while they lived, and whose names do not now convey to the mind impressions of brilliant endeavour in any field whatever. We cannot, with any grace undo what has been done; and these mementos of respectabilities must be left undisturbed. But we can at least insist that, for the future, Westminster Abbey shall be a representative Mausoleum, and in order that this design may be carried out it is incumbent on the authorities to provide additional space. The feeling of veneration for the central edifice itself may possibly excite in some critics aversion to any patchwork project of enlargement; but surely there are modern Architects of sufficient ability and taste to design an Annexe in keeping with the central pile—of hitting the exact mean between servile Architectural insignificance and vain presumption. The plot of ground rendered available by the removal of the old houses now standing on the north-east of the Abbey is that which has been suggested as the site of a new Wing or Memorial Chapel. The Royal Commissioners, it is true, did not unanimously favour this site for the proposed enlargement, though since their report was issued there appears to have been a consolidation of opinion in favour of it. But in whatever direction Westminster Abbey may be extended, the task will have to be performed with the greatest delicacy, and after the most anxious consideration. And it is further a question whether the cost of building the new

Annexe should be defrayed out of the national purse, or whether it should be met by the munificence of a private citizen. In February of 1894, Mr. Yates Thompson, after consultation with Mr. Pearson, who had prepared plans for the Royal Commission, offered to give a sum of £38,000 for the construction of a Memorial Chapel, to be connected with Poet's Corner by a Cloister. The sum specified was the estimated cost of the fabric; the expenditure on the acquisition of property for the clearance and the site being £27,000 more, a sum which the present Parliament will be asked to provide. Mr. Thompson, in making his offer, stated that it would hold good for a year. The twelve months elapsed last February, but it is to be presumed that Mr. Thompson has agreed to an extension of time. The patriotic spirit which actuated Mr. Thompson is unchallengeable, but there have been some searchings of heart as to whether it would be expedient for a distinctively national institution to be beholden to this extent to the generosity of a private purse. Mr. Thompson appended to his offer some conditions which were perfectly reasonable, but it will remain for Parliament to decide whether, in the erection of a necessary addition to the National Valhalla, it would or would not be expedient for the representatives of the nation to have an absolutely free hand in the matter. Many of the most imposing ecclesiastical edifices throughout the country have been erected with moneys accruing from private benefactions; and, indeed, in earlier times the individual donor played a most prominent and even necessary part in the multiplication of those splendid piles of masonry which teach the lessons of history to all who care to learn them. But Westminster Abbey occupies a unique position. It is the resting-place to which, perhaps, the thoughts of great Englishmen instinctively turn when preparing to face the end, and it is the sacred duty of the nation to see nothing is done that is in any way likely to impair the historical and distinctively national characteristics of the great Mausoleum.

COLOURS EMPLOYED BY THE ANCIENTS.

IN antiquity, besides indigo and purple, few colours were employed, and these were obtained for the most part from the vegetable kingdom, but their purity was so great that they have kept well to our own times, after having undergone for centuries the action of the air and sun. The fact is particularly remarkable in the Egyptian tombs; the stone has been disintegrated by weathering, while the colours have been preserved. The colour that we meet most frequently is a mixture of a reddish-brown oxide of iron (red hematite) and clay, known under the name of Pompeian red. This colour, which has resisted for four thousand years the sun of Egypt and the action of the air, is equally proof against acids. The Egyptians reduced it, by rubbing between stones under water, to a degree of fineness that we cannot obtain nowadays by chemical precipitation. An equally precious yellow pigment, also much used, was formed of a natural oxide of iron mixed with much clay, chalk, and water, and browned by the action of heat; the mixture of the two colours gives orange. For this yellow colour, gold bronze or gold leaf was also employed. For blue, they used a glass coloured with copper minerals; this pigment was not less permanent than the preceding, even acids having very little effect upon it. Gypsum or plaster of Paris furnished white, and also formed the basis of pale colours when organic pigments were added to it, probably madder, for red. The colours were always thinned and rendered adhesive by means of gums. It is interesting to know, as is proved by inscriptions, the artists regarded their colours as imperishable.

THE Foundation Stone of the new Glasgow Sanatorium Hospital for Women was recently laid by Lord Blythwood. It will cost £8,000, and will accommodate 28 patients.

AT a meeting of the Rutherglen School Board, on Wednesday, it was resolved to obtain plans for the erection of additional accommodation at Eastfield School, the extra scholars required to be provided for being 300.

DARENTH AND ITS ROMAN REMAINS.

MR. GEORGE PAYNE, F.S.A., of Rochester, who has been superintending the excavations at Darenth, conducted a party of Architects, the other day, over the recently discovered Roman Villa, and gave a happily interesting description of the discoveries he had made. He pointed out that the field was only about a mile from the great Roman road which led from Dover to London, and about three miles from Springhead, which had been identified by Shrubsole and others with the Roman station Vagniacæ, mentioned in the Itinerary of Antoninus, and where many undoubted Roman remains had been found. On a hillside to the west could be seen traces of a British encampment. In later times, after the withdrawal of the Roman garrisons, the district was subjected to a Jutish occupation, a very rough class of settlers. Still later, in Saxon times, Darenth Village Church was built, and Roman tiles and bricks were re-utilised in the pre-Saxon work on the north side of the building. The foundations of the Roman Villa itself formed the quarry not only for that Church, but for many buildings constructed in later times. There was no evidence that it was ever burnt down, but he conjectured that it was gradually abandoned. The site was unusually low, and as the stream was tidal before the Mills were erected lower down, it was necessary to protect the Villa from floods, and so a long retaining wall on the west front towards the river was constructed. The house itself covered a larger area than any previously discovered in England, being at least 350 ft. square, and it probably extended towards the south an additional 300 ft. The lower or western portion of the area was divided into Dwelling Rooms, Baths, and other apartments and Corridors, and to the south were two large Courts, roughly 80 ft. square, separated from the house by a Corridor which ran along its entire front, and divided from each other by a long, narrow building, 84 ft. by 11 ft., with immensely thick walls, having at its further or southern end a semi-circular chamber. Had the curve of the arc been outwards, it would have been explained as a basilica; but, unfortunately, it was rounded off towards the long building. There appeared to be traces of a leaden lining, and he had little doubt that it was originally a cistern. Beyond this building to the south the remains were crossed by a more recent lane, for in the field on the outer side of the lane, belonging to another owner, trial bores had revealed traces of other buildings not yet excavated. The chief apartments were on the slope of the hill on the eastern end of the site, the portion furthest from the river. None of the rooms were very large, and the floors lay about 5 ft. below the present surface of the soil. These floors were generally of concrete, mixed with road pebbles, in a few cases covered with large flat tiles and in others with small cubes of red tesserae; but they had been disappointed so far in not finding any ornamental tessellated pavements, such as were frequently found in other Roman stations in Britain. In several cases traces of fresco paintings showing floral designs were found on the walls, but these had gradually perished after exposure to the air, and the frosts of last winter had greatly injured the remains. In another room the concrete floor has been taken up, so as to show the heating arrangements. These consisted of hypocausts, hollow flues, square on plan, formed on plain flat tiles, and communicating with round flues in the walls which led to a stoke-hole, one of these receptacles for fuel being used to heat a whole suite of rooms. On these flues, which were about 2 ft. high, the thick concrete floors were suspended, and the smoke was carried off by vertical pipes, still to be seen in position in the walls. In one room was discerned traces of alterations by which the room had been shortened and the doorway blocked up at a later period, and in another case an old floor had been discarded, and a new one put in at a higher level. A series of rooms nearer the river, at the western portion of the site, were all of less importance, and showed no traces of having been heated. Half-way down the slope, near the Eastern Court, were a series of three Baths; the largest, or Swimming-Bath, was 40 ft. by 10 ft., and was approached by

four wide and deep steps of concrete, having rounded nosings. At a later Roman period it would be seen a wall of alternate courses of tiles, flints and chalk was built across this Bath, and adjoining it were two smaller Baths each 7 ft. square, and one heated by a hypocaust. On the south of the Villa the foundations of Stables, Granaries and Outbuildings have been excavated. The temporary Museum contains articles turned up by the spade upon the site during the excavations, and include the bones of various domestic animals, including the sheep, goat, dog, horse and ox, deers' antlers, shuttle for net-making, the handle of



TOWER OF THE PEOPLES' PALACE :
BY E. R. ROBSON.

a fan; combs and hairpins have also been unearthed, together with two or three hones, fragments of Durobrivium, Samian, and Upchurch ware (all of coarse character); beads and broken pieces of glass from windows and bottles; bangles, armlets, and ornaments in bronze; small enamelled pieces of jet, a hatchet, bell, and studs of iron and lead. The coins were comparatively few in number, and ranged from Domitian, A.D. 81 to Gratian A.D. 375. After the remains had been thoroughly examined, Mr. Payne escorted his visitors to the parish

Church of Darenth. It consists of Nave, with collar-beam roof, and South Aisle; Western Tower; Chancel, which formerly had also a South Aisle, now walled up; and short Sacramentum, separately vaulted in chalk, and having its thick eastern wall pierced by three narrow and deeply-splayed lancets. The exterior masonry of these lights, and of part of north wall of Nave, and perhaps the lower portions of Tower, is apparently of rude pre-Conquest character. The responds to arcade and the square capital to the built-in column in South Chancel wall are of rude Norman character. The outer surface of the bowl of the large Font is symmetrically divided by rounded arcades into eight compartments, containing crude carving in high relief. These seemed to include infant baptism by immersion in a Font; a seated figure of King David with harp and crown, all proper, to quote the jargon of Heralds College; the Sacrifice of Isaac, the lion of St. Mark, the winged eagle of St. John, a man with spear, and what might represent to the *fin de siècle* eleventh century carver, a conventional ox. The whole is of the Early Norman period. The arcade in Nave is carried by octagonal shafts without neckings, and the windows are of all periods down to Late Perpendicular, the Pulpit being a low and miserable structure, made up of Jacobean panelling, and quite unworthy of the interesting fabric.

THE financing of the Jungfrau Railway scheme, already approved by the Swiss Parliament, for a railway from the Wengern Alp, via Eiger and the Moench, up the Jungfrau is regarded as assured, and the construction of the first section of the line is to be commenced in the course of the present year.

THE Brighton Town Council has finally decided upon a scheme for the alteration and enlargement of the Town Hall at an estimated cost of £30,000.

THE great 40-inch lens for the Yerkes telescope has just been completed by Mr. A. E. Clark, and will soon be shipped to Geneva, where a new Observatory has been constructed. This magnificent telescope is the largest in the World, and eclipses all, not only in size, but in focal range and power. The lens alone, when it came from Paris in the rough, cost £8,000, and since then an enormous cost has been incurred by the grinding and polishing of the lens, which have been going on for two years.

THREE of the great turbines, each furnishing 5,000 horse-power, and each four times larger than any in the World, are in position at Niagara Falls, and four more will be placed in the great pit, cut through the solid rock, 120 ft. long, 180 ft. deep and 20 ft. wide. The shaft from each wheel, sometimes of tubular steel, sometimes solid and eleven inches thick, extends up into the Power House, and to it is fixed a flying field of the great dynamo, 13 ft. in diameter and 15 ft. high. When this is revolving 250 times a minute, it sends forth an electrical current of 5,000 horse-power.

THE Leeds City Council has agreed to buy for its Art Gallery Mr. J. W. Waterhouse's last year's Academy picture, "The Lady of Shallott," and has succeeded in securing it on specially favourable terms from the artist, who is a native of that city.

MR. H. RICHARDSON, Surveyor to the Oldbury Council, has been appointed Surveyor to the Aston District Council out of seventy-two applications for the post.

MR. GEORGE LOPES, M.I.C.E., of the London and Brighton Railway, is the inventor of an Automatic Railway Electric Alarm for level crossings, a working model of which is now on view at the Imperial Institute Exhibition. The approaching train rings an alarm bell at the crossings, and keeps the gong sounding until the train has passed.

THE Worshipful Company of Fishmongers has contributed £1,500 to the decoration of St. Paul's Cathedral, the cost of the mosaic in the Chancel Dome representing the "Creation of Fishes."

THE Liverpool City Council, at its next meeting will be asked to accept a tender for the erection of the new Central Fire Station in Hatton Garden, subject to the Local Government Board's approving of the Council borrowing the money required for the building.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
June 25th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

AN article on the Manchester Municipal School of Art in the new number of the *Studio* raises the question of the importance of Mr. Walter Crane's appointment as "Director of Design" nearly two years ago. At the time Mr. Crane drew up a series of "Suggestions" for the benefit of the Technical Instruction Committee and of the students. They began with a declaration that "the objects of the School are to give by a system of carefully considered and varied courses of study, with due regard to the bent and capacity of individuals, a thoroughly practical knowledge of Designing, Drawing, Painting, and Modelling, more especially in the varied forms of their ornamental application in association with Architecture and technical conditions of manufacture." Mr. Crane thus laid especial stress on Design, and the course which he sketched out in twelve stages was intended to "emphasise the essential relation of necessary units throughout all the branches of Art," while "strengthening the designing faculty and cultivating invention and observation." The old painters trained their pupils first by setting them to copy good pictures and then by leaving them to copy Nature, picking up hints about technique as they went on. Mr. Crane, on the other hand, would set the beginner to make a pattern immediately after he had had some practice in freehand drawing from "typical floral and ornamental forms." The first method produced painters, the second will at least produce designers, and may conceivably do more, though it is at present impossible to discuss its merits. Success alone can justify any scheme of education, and Mr. Crane's plan has not yet been properly tried.

LIKE almost all the Public Art Training Schools in the country, the Manchester School of Art has been dominated by the Science and Art Department. The perfectly organised and at the same time thoroughly pernicious system of "South Kensington," which dooms students to pass many useless examinations, and permits only those who have passed them to train others for the same wearisome ordeal, has too much money to spend in grants, prizes, and scholarships not to be almost omnipotent in all but the wealthiest Schools. The Manchester School has bowed to its authority and has had its reward. The students have passed the examinations of the Department with credit, and the School has drawn handsome sums yearly, the grant for the year ending March 31st, 1894, being £591 5s. out of a total revenue of £1,968 15s. 10d. When Mr. Crane was appointed it was thought, and the writer in the *Studio* still thinks, that Manchester had "committed itself to what is very like an incipient revolt" against South Kensington. But this does not seem to be the case. Mr. Crane's "Suggestions" were, as the writer puts it, only adopted "as materials for an alternative and complimentary course worked in with the older arrangements and fitted on to them as much as possible." As the Department "system" cannot be made to fit on to any reasonable course of instruction whatever, this means that the

"Suggestions" were for the time disregarded. But is it too soon to hope for their revival?

A CORRESPONDENT writes: "Although perfectly satisfied with the Architect who had the Infirmary building in hand, the Aston (Birmingham) Board of Guardians yet judged it best to put the proposed Cottage Homes to competition. Instead of selecting a certain number of competent Architects, and inviting them to compete, the new Board decided that it should be an open competition, with the result that nineteen sets of plans were sent in to compete for the work. Premiums of £70 and £30 for the best two sets were all that the Board committed itself to give. The Board was then naturally compelled to employ a professional Assessor, who was also a local Architect. His award has been announced, so far as the premiums go. This is, however, a small thing. Sets of plans worth, I am told—in time and labour—at least £150, are not sent in for the mere hope of obtaining premiums even of £70 and £30. But, forsooth, the proposal was made to pass over both of the successful competitors, and to give the work, with the substantial remuneration of the Architect's percentage, to one of the unsuccessful competitors. The successful competitors' plans would also be placed in his hands. Surely this was not part of the professional Assessor's recommendation? Was ever anything more unfair to other competitors, or unwise in the ratepayers' interests proposed to a representative body?"

THE question of the public Exhibition of pictures of the nude is just now being actively canvassed in Japan. A painter, M. Kuroda, has sent to the Kyoto Exhibition a picture of this character, which has been accepted and hung. Even the Commissioners have had to give a public explanation of their reasons for this course, and the police for their permitting it. The former, it appears, were divided upon the point, but decided in the affirmative, as otherwise they did not see how they would get out of a similar difficulty at an International Exhibition where many nudities would be most certainly presented. The police have had more difficulty in giving a satisfactory answer, seeing that they have but recently been checking the representation of suggestive scenes on the stage. The Press appears to be unanimous in the singular opinion that, whilst the foreigner is fond of representations of the nude, the Japanese is only offended thereby.

AFTER all, the proposed Roman Catholic Cathedral at Westminster, of which we gave a description in our last issue, is not to be a reproduction of the ancient Basilica of St. Peter. We learn from a statement by Cardinal Vaughan in the *Tablet* that this idea has now been abandoned. Mr. Bentley, the Architect, has produced the plan of a building, the style of which is Byzantine like that of Sant' Ambrogio, Milan, with certain details suggested by St. Mark's, Venice, and San Vitali of Ravenna. In the Apse will be the Monk's Choir, as in Sant' Ambrogio, visible from the main entrance. The Canon's Stalls will be in the Sanctuary.

A WELSH historic landmark, the Devil's Bridge, in the vicinity of Aberystwith, appears to be in peril of removal by the ravages of time and stress of weather. The heavy winter frost cracked the Bridge right through the middle. A portion of the southern side has also given way, and the whole structure, it is said, may collapse at any moment. The Bridge is believed to have been built by the Cistercian monks of Strata Florida, and spans a huge rocky fissure. For the sake of old and cherished association, and for the sake too of picturesque Wales, it is to be hoped the danger of collapse will be averted.

IN Edinburgh last week the Incorporated Gas Institute held its annual meeting. According to the President, Mr. Robert Mitchell, of that City, the present-day practice in gas engineering has reached the stage of "the stagnation of perfection." That is a great deal to say, particularly when one remembers that the industry about which it is said involves the labour of nearly 60,000 men engaged in carbonising an annual weight of coal amounting to twelve million tons. The capital sunk in gas works, authorised by Parliament, is no less than

sixty-eight millions sterling and there is to be added to the amount invested in the public gas undertakings a large number of private works supplying industrial concerns, noblemen's mansions, and offices, &c. Mr. Mitchell indicates one direction from which he anticipates progress in reducing the cost of production. That is the Lowe Water Gas Plant, an American invention, by which carburetted water gas of twenty-two to twenty-four candle power can be delivered into the holder at from 1s. to 1s. 3d. per 1,000 cubic feet. Mr. Mitchell, however, regards this as an enricher rather than a separate illuminant agent. Respecting acetylene, Mr. Mitchell finds its position "to be that of a photometric value of 240 candles, but has little more enriching effect than coal gas of sixty candles." Immense gas holders are, in the President's opinion, the most economical, and he further lays stress on the reasonableness of educating consumers up to the use of a higher candle-power rather than reducing the standard of illuminating quality.

OF all historic relics on the north side of the City of London, the most interesting is the venerable Gateway of the Grand Priory of the Order of the Hospital of St. John of Jerusalem in England, which forms the Entrance to Clerkenwell Close. It is mainly in commemoration of the numerous Historical, Biographical, and Literary Associations attaching to this locality that Messrs. Cadbury, Jones, and Co., of the Haymarket, have issued, in a handsome portfolio of large folio form, a series of historical notes on St. John's, Clerkenwell, written by the late Mr. John Underhill, together with a letterpress description of the Grand Priory, and a number of etched plates and other illustrations by William Monk. Mr. Monk's etchings are interesting, and Mr. Underhill has gathered together many particulars of the history of this curious nook in Old London from days before the Norman Conquest down to those of Dr. Johnson and Edmund Cave (Sylvanus Urban).

ARCHITECTS should bear in mind the Ecclesiastical and Educational Art Exhibition, to be held in St. Giles's Hall, Norwich, from October 7th till the 11th. Promises of support in the general trade section have been received from all the leading Church and School furnishers throughout the country, so that the Exhibition will be representative of the entire trade, and Clergy and Churchmen generally are being invited to contribute towards the Loan Collection, which promises to be of more than usual interest. The Church Societies, who have found by experience that the Exhibition forms a rendezvous for their friends and supporters, will again muster in force. The exhibits will include articles of every description used in the services of the Church, and in the fitting, lighting, warming, ventilating, and the decoration and embellishment of Churches, including stained-glass windows.

THE designs for the new Chapel of the Orphan Asylum, Wolverhampton, opened on Friday last, were by Mr. F. T. Beck, Architect, Wolverhampton, and Messrs. Willcock & Co., Wolverhampton, were entrusted with the work of building the Chapel, the cost being estimated at nearly £4,000. Cruciform in shape, the plans are so arranged internally as to provide Nave, Chancel, Transepts, Organ-chamber and Vestries; and in length it is about 100 ft., in width 50 ft., and is 40 ft. high to the apex of the roof. It is mainly constructed of pressed bricks, relieved by diaper-work, and is faced throughout with Hollington stone. The roof is covered with blue Bangor slates, and, except under the seats, where wood is used, the floor is tiled. There are three entrances to the Chapel, one in the North Transept for the children and two at the west end for the public. Oak and deal have been used in regard to the interior fittings, and the windows have been fitted with Cathedral glass, with delicate border traceries.

ANOTHER slice of "dormant" capital was invested in pictures at Christie's, when the Price Collection of the Early British School was sold for £87,000. With one exception—the Dudley in 1892—this is said to be the largest yield of any single picture sale during the past ten years. There were mighty bids.

A Gainsborough—the portrait of Lady Mulgrave—fetched 10,000 guineas, or just ten times as much as it realised 15 years ago. Some of the Turners fetched enormous prices, ranging from 6,400 and 5,200 guineas at their highest level. The Val d'Aosta went for 4,000 guineas; it was sold less than 20 years ago for less than £1,000.

THE new Town Hall at Hamburg, where an Imperial banquet, in honour of the opening of the Baltic Sea Canal, took place, replaces the ancient Rathhaus, which was destroyed by fire in 1842. It is an imposing structure, the creation of nine Hamburg Architects, of whom two have died since the Foundation Stone was laid in 1886. The style is German Renaissance, and the total cost is estimated at 10 million marks. On the walls of the Banqueting Hall are gigantic paintings representing old Hamburg, with its quaint old-fashioned Towers and buildings, and the old Brandenburg Fleet of wooden war-ships. Set over against this is a picture of a fleet of United Germany's most powerful modern iron-clads, while facing each other, from opposite ends of the room, are pictorial representations of the rock bound coast of Heligoland, and a map, in antique design, of the North Sea Canal.

IN his young manhood Mr. Clarkson, who has just published his "Memories of Merrie Wakefield," was engaged in most comprehensive surveys, which took him more or less all over the Kingdom, and brought him into constant contact with such men as Telford, the Stephensons, and Hudson, the Railway King—whose memory, however, he does not seem to particularly reverence. On the 9th of November, 1835, Mr. Clarkson, in his capacity of Surveyor, met George Stephenson and the Engineers, Surveyors and Promoters of the North Midland Line at the old Tontine Hotel, Sheffield. The prejudice and opposition to the locomotive, as well as the shifts of the poor, much harassed Engineers and Surveyors, and afford material for many a humorous paragraph.

THE American School at Athens in the excavations it is carrying on at Heraion of Argos has met with much success. The works rival in magnitude and importance those of the French School at Delphi. Professor Waldstein has 250 men at work under his direction. Two Temples and five other buildings have been discovered, and quite recently a large colonnade, in a good state of preservation, has been unearthed at a depth of twenty-five feet beneath the surface of the soil. The finds of relics have been numerous, and cover the whole period of Hellenic history. They include two marble heads of the most perfect epoch of Greek Art, and many gold and bronze objects, as well as vases and terra-cottas of the Homeric age. Many tombs have also been laid bare, most of them bearing Argive inscriptions.

ALTHOUGH there was in Liverpool in 1880 a Loan Ethnographical Collection, in which many of the specimens in the new Gallery, just opened in the Museum, were shown, there has been no Gallery entirely devoted to ethnography. Since 1880 ethnographical material has been steadily increasing by donation and purchase; but, owing to the exigencies of

space, it has been necessary to keep it packed away in the cellars under the Museum and Art Gallery, where there are at present numerous other large collections in all Departments, which there is no room anywhere in the Museum to display. The arrangement of the Gallery has been accomplished by the Assistant Curator of the Mayer Museum, Mr. P. Entwistle, under the direct supervision of the Director of Museums, Dr. H. O. Forbes, who for many years has made ethnology a special subject of study, especially that of the Indo-Malayan and Milanese races. The new Gallery is entered by two doors, one leading from the Egyptian Gallery in the basement of the Mayer Museum, and the other from the Aquarium. Near the Aquarium Entrance, the Exhibition commences with the oldest evidences of man, those of the Old Stone Age, the Newer Stone Age, and the Bronze Age, in Europe and Asia. The remainder of the space is arranged geographically, and there are few portions of the World unrepresented.



THE BLIND INSTITUTE, DEANSGATE, MANCHESTER: CHARLES HEATHCOTE, F.R.I.B.A., ARCHITECT.

ONE of the most interesting old Churches in Lancashire is the Parish Church of St. Cuthbert, Halsall, near Ormskirk. The Church stands on rising ground in the midst of a small village, where, as elsewhere in the district, are the remains of the old Village Cross. A few hundred yards from the building, between the Church and the new Rectory, are portions of an old stone house, forming part of the previous Rectory, pulled down about fifty years ago. These remains were so embedded in the comparatively modern structure, that their antiquity was not noticed. The foundations of this older building, which is not unlikely to have been the Manor House of the Halsalls, are shortly to be laid bare, and no doubt many interesting facts will be brought to light; but the remains which are now above ground indicate the existence of a fine great Hall, with open timbered roof, about 40 ft. long by 30 ft. wide, built during the Late Perpendicular period, probably some time during the reign of Henry VII. The Church, which is a most interesting structure, mainly of the Decorated period, was ably restored in 1886 by Messrs. Paley, Austin

& Paley of Lancaster. In the North Chancel wall is a beautiful recessed Tomb, measuring 17 ft. from floor to top of pinnacles. A minute technical description of the dress of the priest who lies within it is in preparation by the Historic Society, and a similar account of the still more beautiful recumbent figures on the Altar Tomb on the opposite side of the Chancel is to be given, and thereby it is to be hoped that the exact date of these monuments may be recovered. The three figures are all carved in alabaster, but no inscription remains to testify to their identity. The knight in armour is, however, clearly a Halsall, from the coat of arms carved on his breastplate. Whether the recumbent female figure by his side is his wife, is a question which may perhaps be solved by the researches of the Historic Society. One of the most noticeable features in the Chancel is the north door, opening into the Vestry and Organ-chamber, formerly a Chapel. The upper portion of the woodwork is covered with elaborate tracery, the effect being rich in the extreme; very few similar instances exist in England. The depth of the stone mouldings of the archway is also most remarkable for such a small door; they are about 2 ft. 6 in. across. The lock is of a massive character, and the key nearly a foot long. Some of the external carved gargoyles are of much interest. The curfew still peals out its warning on winter nights to the traveller, though the wild wastes which once existed here are now converted into well cultivated farms.

THE new Bridge over the Clyde joining Glasgow to Rutherglen was inaugurated on Thursday last by the laying of the memorial stone. The new Bridge, which replaces an older structure, erected as far back as 1775, is a handsome granite Bridge of three arches, the centre one of which has a span of 100 ft., each side arch having a span of 90 ft. In width the new structure is a great improvement on its predecessor, for whereas the Bridge of 1775 was only 16 ft. 6 in. between the parapets, the new Bridge is no less than 60 ft. between its parapets, which permits of a roadway 36 ft. wide,

with a 12 ft. pathway for passengers on either side. The old Bridge was not only too narrow for the traffic at this point, but its foundations were rapidly becoming undermined by the scour in the river. The engineers of the new structure have secured it against any similar mishap by carrying the new foundations down to the rock, through the overlying silt and boulder clay. The piers were founded by steel caissons, sunk by means of compressed air, and carried down to depths of 57 and 54 ft. respectively below high water mark. The abutments, which are 39 ft. 6 in. from front to back, are carried on timber-bearing piles owing to the soft nature of the banks, and are backed with Portland cement concrete, the upper portion being rubble concrete in Arden lime. The Bridge is now well advanced. The arches should be finished in the Autumn, and the structure itself opened shortly afterwards. The engineers of the undertaking are Messrs. Crouch & Hogg, C.E., the contractors being Messrs. Morrison & Mason, Limited, also of Glasgow. The cost of the works is estimated at £64,000.

THE Equestrian Statue to the memory of the late Field Marshal Lord Strathnairn, which is erected at the junction of the Brompton and Knightsbridge Roads, facing Sloane Street, has been unveiled. The pedestal is of Portland stone, treated in the English Renaissance style, and the Statue, which is of bronze, was cast by Messrs. G. Brond and Son, of Uxbridge Road, W. The outlay has been £3,500. Lord Strathnairn is represented in a Field Marshal's uniform, with helmet prescribed in the regulations for field service in the East. Mr. E. Onslow Ford, A.R.A., was the sculptor.

A GIGANTIC Warehouse has just been brought to completion at Sandon Dock, Liverpool, by the Midland Railway Company. It is estimated to have cost, including land, about a quarter of a million, and is said to be one of the finest buildings of its kind in the Kingdom. The building is five stories high, and is 322 ft. long, 176 ft. wide, and 84 ft. high. Some idea of the colossal undertaking may be gathered from the fact that before the foundation of the Warehouse could be laid 33,000 cubic yards of soil had to be excavated, while the unusual proportion of the building may be indicated by the following statement of materials used: Bricks, 6,000,000; stone, 1,800 tons; cement, 2,000 tons; concrete, 16,000 tons; slate, 700 tons; ironwork, 6,000 tons; lead, 100 tons; nails, 30 tons; glass, 1½ acres; and zinc, over ½ an acre. The area of the floor space is nearly 6 acres. The building itself is supported by girders weighing 10 tons each; these rest upon 96 columns, weighing 4½ tons each, the latter being carried through all the floors, resting upon a foundation composed of massive stone blocks, 12 tons each, embedded in brick and concrete, 16 ft. deep. The whole of the building and surrounding yard is lighted by the electric light, and each floor is supplied with three fire hydrants, all being of the latest description. The machinery and engines are also of a very complete kind, and fitted with all the newest improvements. The whole of the work has been carried out from the design by the Company's Architect, Mr. C. Trubshaw, F.R.I.B.A., of Derby, by Messrs. W. Brown & Sons, contractor, Salfords. It may be stated that Messrs. Brown & Sons have executed works at different times for the Midland Railway Company, to the amount of £5,000,000, including new Station and Hotel, Bradford; large Warehouse, Leeds; Alexander Dock Station, Bootle, &c.

A "WEDGWOOD Centenary Loan Exhibition," to celebrate the centenary of the death of Josiah Wedgwood, is to be held at Burslem, his native town and "the Mother of the Potteries," during July and August. The Exhibition will be housed in the Wedgwood Institute, the foundation stone of which was laid by Mr. Gladstone in 1863. The South Kensington authorities, the Corporation of Liverpool, Lord Tweedmouth and other London collectors, and Mr. Walker and Mr. Rathbone, the well-known Wedgwood experts of Liverpool, have lent their best examples of Wedgwood ware to the Exhibition, but the backbone of the show, which will certainly be the finest ever got together, is Burslem's own Wedgwood collection, presented *en bloc* to the town by Mr. Thomas Hulme, a well-known figure at pottery sales in London. Mr. Mundella is to open the Exhibition to-morrow.

THE life of a house proprietor does not always consist of the pleasure of collecting rents. Take the case of Mr. J. F. Thompson, a Camberwell man, who owns four houses in Willesden, which, unfortunately, he has allowed to fall into a state that makes them injurious to the public health. For this he was summoned before the Harlesden magistrates, and a letter from him was read promising to do whatever was requisite. The document contained the following curious picture of the sorrows of a house proprietor: "Do not think my bankruptcy is any fault of my own. I do not owe any man anything. Some two or three years ago I bought nineteen small houses. I got into the hands of what I call sharks. They not only took my houses, but run me into a loss of £2,000. This has nearly drove me mad. I have paid the ground landlord and he will not foreclose. I hope to be out of the hands of the trustees in about a

month. They are taking all the rents." In reply to questions from the Bench the unfortunate landlord stated that the £2,000 mentioned in his letter referred to law costs, and that Mr. Justice Vaughan Williams said he had been very harshly dealt with, and that it was very hard to lose so much money when he owed nothing, but the Bench made the order the District Council asked for.

MANY people are under the impression that the Obelisk of Luxor, which is a great feature of the noble Place de la Concorde in Paris, was placed there by Napoleon the First. But this does not appear to be the case. It was taken to Paris in the reign of Louis Philippe and put up where it now stands. The Obelisk is much talked about just now, for it has been discovered that it is in danger of toppling over. It is described as in a general state of dry rot, and crumbling away. Engineers have been sent post haste to Rome and to London in order to examine the Obelisk in the Piazza of San Pietro and Cleopatra's Needle on the Embankment, and to see whether anything can be done to support and preserve properly the rickety Monument. If the Luxor Obelisk be, however, really in a "general state of dry rot," it is to be feared that nothing can be done to effectually save it.

THE Town Council of Oswestry received at their last meeting a report from Messrs. Taylor, Sons, and Santo Crimp, of Great George Street, Westminster, with reference to the disposal of the sewage of the Borough. The present population is 9,000, and the scheme proposed provides sufficient for 11,000 persons. The town was sewered some years ago, and the sewage is now discharged into two small tanks at the dust-yard, where a small amount of purification is effected, and the effluent flows into the water course. The engineers remark that as the stream into which the effluent is discharged is very small, should a chemical process be adopted, the treatment must be followed by the application of the clarified sewage to land or to artificial filters. They suggest two alternatives, one for dealing with the sewage on a site of five acres by means of a chemical process, to be followed by filtration of the effluent through artificial filters, the other for treating it as at Wirbleton, on a larger farm 5½ acres in extent. The initial cost for filters and presses of the first scheme, for which the land had already been purchased, would be £9,450; but the working expenses, including interest, would be £1,248 a year. The cost of the additional land required for the larger scheme would be £3,200, and of laying it out and providing works £5,750, or £14,950. On the other hand, the working expenses would be so much less that, including interest on the larger original cost, it would be £732 a year. As spread over 60 years, scheme No. 1 would cost £6,000, and No. 2 £35,000, and on account of its greater efficiency they strongly recommended plan No. 2. After a long discussion, the Council adopted scheme No. 2, with the exception of the solidification of the sewage, and subject to the sanction of the Local Government Board.

Our Consul at Naples notices in his last report the progress that has been made towards the rebuilding of that town. Within the last few years vast portions have been pulled down, and the former narrow, tortuous alleys have been replaced by wide streets, lined on either side by handsome palaces. A part of the magnificent new thoroughfare called the "Rettillo," which runs from the Railway Station on the extreme east to the General Post Office in the centre of the town is now open to the public, and its construction has entirely altered the conditions of existence in Naples. It will be news to many people that no city in Europe, except London, has a traffic equal to that of Naples.

CO-OPERATION is advisable in many things, but not in chimneys. The co-operative chimney of a huge block of dwellings, or a street, or a parish, would be sufficient to poison the atmosphere of a town. Smoke is like poison. Served in infinitesimal quantities it may not do much harm, but administered on the co-operative principle it is decidedly dangerous. This appears to be the opinion of Mr. De Rutzen,

before whom the proprietors of Queen Anne's Mansions, Westminster, were summoned for permitting an undue quantity of soot in solution to issue from the chimney of a shed where the electric light is generated for the whole block of buildings. The manager argued that the smoke which the chimney emitted was not larger in volume than the combined quantities that would have come from the chimney-pots of all the flats, supposing each tenant had fires burning. In other words, it was smoke conducted on the co-operative principle, no tickets required. Mr. De Rutzen, after pleasantly remarking that the Mansions were the biggest and most unsightly block of buildings in London, condemned the inventors of the new system of smoke distribution to pay a fine of £5, with five guineas costs. They went through a similar process two years ago.

A LARGE and imposing Gateway at the South Queensferry entrance to the Hopetoun House grounds has been completed. The design was begun by Messrs. Wardrop & Anderson, Architects, and completed by Dr. Rowand Anderson, who has personally taken much interest in the wrought-iron work, which forms an important part of the scheme. The principal entrance consists of a large gateway, 15 ft. wide, with massive piers, 22 ft. high and 5 ft. square, faced with Ionic three-quarter columns, and surmounted by the appropriate frieze, entablature, and cornice of this order of architecture. On the top of the piers are to be placed the heraldic supporters of the Hopetoun House. Extending on each side is a crescent wing, divided into five divisions by double columns of the Tuscan order, and surmounted by an appropriate cornice. Standing on the top of a set of columns is a carved vase. Each wing is terminated by a massive pier rusticated and panelled, and at right angles outwards to these piers on each side is a wing wall with balustrade. The total length of the crescent, which terminates at the piers, is 90 ft. The main Gateway is filled with a pair of magnificent wrought-iron gates of a chaste and elegant design, having in the centre of each a medallion with wreath and the Hopetoun monograms. Above the gates is an ornamental fixed part of the Gateway, pyramidal in form, broken up by curved bands, foliage, and scrolls, having the monogram of the present Earl and the date 1893 worked into it, and finished off with an Earl's coronet. The total height of the Gateway is 22 ft. In the first division on each side of the great Gateway are smaller gates.

At the Art School at Bushey, presided over by Professor Herkomer, there are about eighty students, the ladies being in the majority. Professor Herkomer has no financial interest in the School, and gives his teaching freely. He is guide, philosopher and friend to all his pupils, and never loses sight of them in their after life, and is always ready to help them and put work in their way. In his new house, "Lulu-laund," he has provided a Picture Gallery mainly for the purpose of showing the best work of the students to anyone who goes to see him. Applicants to the Bushey School must send in a specimen drawing. When the Professor cannot discern any promise of real talent, a polite negative is sent. Doubtful cases are advised to obtain tuition from one of his old students, and after working for a time in their studios they can be drafted into his own preliminary class. Herkomer's view is that the Art School should be dominated by the personal influence of the artist, and he therefore limits the number of pupils, and has only one teacher to assist him.

A PLAN of the general lines of the Paris Exhibition of 1900 has been issued by Mr. Picard, the Commissioner-General. The River Seine will be the true centre and principal motive of the show. The Palais de l'Industrie is to be demolished, and a steel bridge flung across the Seine at that point, and few will regret its disappearance, as it blocks one of the finest views in the city, and is (for Paris) an ugly building. The Eiffel Tower will, however, be spared, as its removal would cost a largesum. Moreover, many people are still curious to see it, and probably it will be decorated in a new fashion. The principal entrance will be from the Champs Elysées, and the first buildings

seen on entering will be those of the Administration, and of Education and Instruction. To the right of this entrance, and facing the Invalides, will stand the Fine Arts building, and opposite to it the retrospective Museum of French Art. These two buildings will



THE FONT, EMANUEL CHURCH, WEST DULWICH: BY EDWIN T. HALL.

be permanent. This part of the Exhibition, namely, around the present Palais de l'Industrie, will be devoted to Art of all kinds. Between the Invalides and the Pont d'Alma, on the right bank of the river, will be situated the buildings for Horticulture, Social Economy, and the City of Paris. On the left bank, from the Pont d'Invalides to the Champ de Mars, the buildings for foreign nations, the army, navy, forests, hunting, and fishing will be located. The Trocadero will be the site of the Algerian, Tunisian, and other colonial exhibits. The Champ de Mars will contain the great industries and Agriculture. A Circular Electric Railway and other means of transport will be provided for visitors. The estimated cost of the works is over a hundred million francs, that is upwards of four millions sterling.

THE death of Mr. John Evan Hodgson, R.A., will be much regretted in artistic circles. He was well known in London, where he was born in 1831. His early years were passed in Russia, but he was educated in Rugby, and became a student of the Royal Academy in 1853. Three years later he exhibited his first picture, and he has been a regular exhibitor since. Up to 1869 he had chiefly painted Interiors and historical subjects, but a visit to Morocco turned his attention in a new direction, and he has since 1870 chiefly painted Moorish subjects. He was elected a Royal Academician in 1879.

THE Incorporated Society for Promoting the Enlargement, Building and Repairing of Churches and Chapels has made grants of money in aid of the following objects, namely, building new Churches at Maesteg St. Michael and all Angels', in the parish of Llangnwyd, near Bridgend, Glamorgan, £100, and Preston St. Augustine, Brighton, £80; rebuilding the Church of St. Lawrence, Carlton Miniott, near Thirsk, Yorks, £40; and towards enlarging or otherwise improving the accommodation in the Churches at Rettendon All Saints, near Battles Bridge, Essex, £30; Southtown St. Mary, near Great Yarmouth, £25; and Wandsworth St. Anne, Surrey, £35. Grants

were also made from the Mission Buildings Fund towards building Mission Churches at Rubery St. Chad, in the parish of the Lickey, near Bromsgrove, £25; and Stonebridge St. Peter, Middlesex, £10. The Society likewise accepted the trust of sums of money as repair funds for St. John the Baptist, Felixstowe, near Harwich, Essex, and St. John the Baptist, Leamington. The following grants were also paid for works completed:—Llanbadarn Fynydd St. Paternus, Radnor, £20; Norton St. Peter, Yorks, £20, balance of a grant of £90; Peterborough All Saints, £100; Holdgate Holy Trinity, Salop, £20; Rhosmarket St. Ishmael, Pems., £10; Ebony St. Mary, Kent, £10; Barmouth St. John, Merioneth, £35; Colehill St. Michael and All Angels', Dorset, £100; and Victoria Docks St. Luke, Essex, £45. In addition to this the sum of £237 was paid towards the repairs of ten Churches.

No remains of the original Trinity College, Dublin, now exist. Neither roof nor wall, not even a trace of the foundations. The College of 1595 was nothing more or less than a very small square Court, which has come down to us under the time-honoured name of "The Quadrangle." The fabric of Queen Elizabeth's College was removed early in the last half of the seventeenth century to meet the exigencies of increasing numbers of students. Within the quaint enclosure of the Quadrangle was the steeple of the ancient Augustinian Monastery of All Hallows, on the site of which Trinity College was built, with the Porter's Lodge on the ground floor. On the second story of the Tower was the bell, the predecessor of the famous Big Ben that resides in the Campanile, and whose rich and musical tones reverberated far and wide round Dublin. The Quadrangle was furnished with a row of houses on the east, west, and south, in all some seven buildings, Students' and Fellows', the north side being occupied, among other structures, by the Hall, Library, Regent House, and Chapel.

THESE edifices were built of thin red Dutch brick bedded in mortar, and supplied with wooden framework. The precincts of All Hallows covered 28 acres, and was made the very best use of by the Governing Body of Trinity College, its new owners. The earliest attention was turned in the direction of utilising the surrounding grounds. There is extant a lease of two plots of ground which was made in October, 1594, to a shoe-maker of the name of Peter Vaughney. This tenant undertook to lay out three fair gardens, planted with good and profitable herbs, as well as several sorts of fruit trees "The Fellows shall have free liberties, at their pleasure, to have their key and door to walk therein for their recreation, and they are to contribute twenty shillings to make a partition wall of mud between the orchard lying on the east and the said ground."

SATURDAY was another sensational day at Christie's, when the highly important Collection of Pictures by Old Masters of the late Henry Doetsch, came under the hammer. The Collection is the creation of the last twenty years, Mr. Doetsch aiming especially at the

acquisition of works belonging to the best periods of the various Schools of Italy and the Netherlands, but both the German and the Flemish Schools were represented. The Collection was peculiarly rich in portraits of the Medici family and of the Royal House of Spain. An unusually large number of the pictures were at one time or another in such renowned Collections as the Orleans Gallery, the Galleries of Charles I., the Marquis of Exeter, the Marquis of Donegal, the Marquis of Hastings, and the Duke of Roxburghe and others.

THE present Summer Exhibition of the Royal Institute of Painters in Water Colours, consisting of studies and sketches by the members, makes an agreeable change, both in aspect and style, from the usual displays of finished water-colour drawings. There is in it a great mass of inferior work for the exhibition of which, in the inchoate form of studies, no adequate reason is forthcoming; but standing out from the substratum of mediocre productions is a good sprinkling of fine and interesting things, throwing new side-lights on the talent of the painters to whom they are due. It would greatly add to the interest of such a collection as this if, on a future occasion—imitating the example of the Painter-Etchers—the Institute were to supplement the sketches of its members by a retrospective display of sketches by the deceased masters of English Landscape, with Constable at their head. Turner is never fully revealed in a preparatory sketch, but De Wint, David Cox, and Constable himself are often at their very best in this early stage. The last named painter, indeed, shows himself, in his marvellous notes and studies of earth and sky, the first, and, perhaps, the greatest of impressionists. It is not necessary on the present occasion to work through the whole Exhibition laboriously, drawing by drawing, but we may select for notice a few of the best and most distinctive things in it. Mr. John Fulleylove is infinitely happier in his finished studies than when he aims higher and seeks to make pictures of them. His "Arch of Titus, Rome," showing this familiar view of the Eternal City in the suffused warmth of veiled sunshine, is admirable, its genuine pictorial charm being attained by no sacrifice of Architectural truth.

A CAPITAL landscape, which further working upon would spoil, is, Mr. A. W. Weedon's



SILVER ALTAR PLATE: DESIGNED BY EDWIN T. HALL.

"Valley of the Arun from the Downs," with its far-stretching blue distance half wrapped in haze. Mr. Ed. M. Wimperis paints with his usual breadth and skill, and also with his usual lack of sympathy and true character, in "Broxtton, Cheshire."

The Builders' Journal COMPETITIONS.

No. 4.—A Village Church.

Designs are required for a Village Church to seat 200 people. The site is a hill-side, rising one in twenty from North to South, and situate in a stone country. The cost is not to exceed £2,500. Drawings to be submitted on or before Monday the 22nd of July.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eightpence. Three insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.



MEN WHO BUILD.

No. 18.

MR. EDWIN T. HALL.

"It is our charter's boast that we, as a corporate body, exist for the advancement of Architecture, and Architecture is at its highest when its creations not only display the grace of artistic clothing, but are the shrine of healthy and vigorous life."—EDWIN T. HALL, at the Institute.

CAN any good come out of Nazareth? The City of London is not appreciated for any artistic tendency it may have beneath the contangoes of the Stock Exchange, or the real turtle of civic life. There is very little real "Art" within its old boundary walls and gates, themselves long since departed. The old demarcations have become obliterated and the City proper has lounged beyond its original limits, right round the compass, and yet we do not find that it has swallowed any Fine Art notions with its soup and champagne, or impregnated itself with any influences likely to mature its inartistic soul in times to come. The Corporation has done one or two "nice" things in its time. It has struggled against Fate, and the almighty dollar of Commerce—which, after all is the be-all and the end-all of a commercial community—has sat upon and dominated its every good intention. With the Art side of the City one does not, therefore, get too critical, for the men of many markets do not appreciate the fine work of Belcher and Norman Shaw, of Aston Webb and Colcutt, not even of Inigo Jones and Wren. The upward tendency of Brighton "A.s" and mangel wurzels rule their hearts with more potency than the aspect of a fine work in brick and stone, and that is perhaps why the income of a City Architect is immeasurably larger than his brethren of the West. How Edwin T. Hall came to install himself in Moorgate Street, and having done so, how he remains there, is one of those things which no man can explain, and none have the impertinence to enquire into.

It was the magical "craftsmen" business that prompted you to go Citywards, for it is, perhaps, mostly due to Edwin T. Hall that this new measure at Conduit Street is in the air. In the R.I.B.A. Report for 1894, reference is made to his proposal for the Institute to encourage and stimulate Craftsmen, by giving medals and other awards, and to exhibit their works with the Students' drawings so as to form an annual Exhibition, in a wide sense, of the rising talent in the Art and Crafts of Architecture. The suggestion, however, did not meet with the complete approval of the Council who referred the matter to the Art Standing Committee, who in turn appointed a Sub-Committee to meet Mr. Hall



upon the matter. Although the Sub-Committee, it is well known, were not only unanimous, but enthusiastic, in their acceptance of the suggestion, it was never brought to fruit until the Institute made the serious proposal dealt with in the last issue of THE BUILDER'S JOURNAL. Mr. Hall's suggestion and the later proposal of the Institute differ in this respect that the one brings forth the latent talent of unknown men, whilst the other is but a recognition of craftsmen who have made their mark. But from one blessing another may follow.

It would be somewhat premature to trace too closely the career of Edwin Hall, who, as Architecture goes, is only just in the hey



"IVY HATCH," IGHTHAM, KENT: BY EDWIN T. HALL

day of his practice. At the Institute—on the Council of which he has sat for some years—he has done perhaps more real good than any other member. For seven years he acted as Hon. Sec. of the Practice Standing Committee, and those who know what work

Architect of great resource can compete against all the recognised "Hospital" men, and beat them at their own game. Mr. Hall's drawings for the Lewisham Competition have been recognised by more than one competent authority to be masterpieces of hospital planning.

In an active practice of some years standing, Edwin Hall has shown an integrity of purpose which claims for him the friendship of the highest in the Profession. He has a keen sense of professional etiquette which has been more than once a shining light to men who come in contact with him.

Professional Items.

At the monthly Town Council meeting for the rebuilding of the Swansea Markets, the Swansea Corporation has decided to accept Messrs. Bennett Brothers', contractors, The Architects are Messrs. Wilson & Moxham, of Swansea, whose designs were selected in open competition in 1889 by Mr. Alex. Graham, the Assessor appointed.

FOUNDATION STONES OF NEW Wesleyan Chapel and Schools were laid on Wednesday last, at Bramhope, near Leeds. Mr. J. Morley, F.R.I.B.A., Architect, of Bradford and Harrogate, prepared the designs of the building, which is in the Decorated Gothic Style. The plan consists of Nave, Chancel, Transepts and Organ Recess. The fittings are of pitch pine, and will give accommodation for 170. A Tower and Spire, 120 feet high, form a feature at one angle of the building. Behind the Chapel is the School with Class Rooms, Vestry and detached House for caretaker. The cost will be £2,200. The exterior walling will be of Apperley and Bradford Stone, with Ashlar dressings of Guiseley stone. The windows will have tracery heads, filled with ornamental leaded lights. The contractors are:—Mason, I. Lawrence, of Horsforth; Joiner, S. Kaye, Pool; Plumbers, Shuttleworth & Sons, Otley; Slater, W. Walker, Otley; Plasterer, A. Taylor, Eccleshill; Painters, Couldwell & Sons, Leeds.

At a meeting of the Finance Committee of the Newcastle Corporation, held on Thursday last, Mr. Leeson presented a report estimating the cost of repairing St. Nicholas's Lantern at £1,700 or £1,800, and stating that it would be dangerous to recommence ringing the bells in the present condition of the Lantern. It is asserted that the Corporation is responsible for its repair.

THE Memorial Stone of a Wesleyan Mission Hall was recently laid at the corner of Tudor and Belle Vue Roads, Lower Easton. The building will consist of a lofty Hall, 70 ft. by 52 ft. This will accommodate 500 adults, or 750 children, and an additional 70 or 100 in an end Gallery. The two sides will be arranged for sub-division into six Class Rooms (each 14 ft. by 10 ft.). There will be on the ground floor also a Men's Bible Class Room, 23 ft. by 18 ft., capable of accommodating 80; an Infant School, with Gallery for 120; Vestry and Lavatory accommodation. Upstairs will be two Class Rooms, each 18 ft. by 14 ft., accommodating 50 each. The Hall will have an open timber roof, and all the rooms boarded dados, the joinery being of pitch-pine. The Contractors are Messrs. Wilkins & Gosling, and the Architect is Mr. J. H. La Trobe, F.R.I.B.A., of Bristol. The estimated cost is £1,600.

THE rebuilding of the "Fleece Inn," Rochdale, is being carried out by Messrs. J. & J. Coates, under the superintendence of Mr. Thos. A. Filton, Architect, of Manchester. The contract price is £1,970. Mr. Filton has also in hand the erection of thirteen Workmen's Dwellings at Rhodes, West Manchester.

THE Wesleyan community at Totley Rise have long desired a new Chapel. The Trustees having determined to commence operations at once, seven foundation stones were laid on Thursday. The building will serve both as a Chapel and School until funds permit of the erection of a large Chapel, for which ample space has been left on the front portion of the land. The building will be cruciform in plan, the Chapel, forming the Nave, being 45 feet by 22 feet. There will be a School Room, 31 feet by 15 feet, and two Class Rooms, 15 feet by 10½ feet. The Vestries and the Class Rooms will be divided from the Chapel by revolving shutter screens, permitting the rooms to be thrown open into the Chapel, and thus give accommodation for 360 persons on special occasions. The building will be of stone, the Architect being Mr. Joseph Smith, of Hartshead. The Contractor is Mr. J. Vasey.



A SKETCH STUDY FOR DESIGN: BY EDWIN T. HALL.

that Committee at Conduit Street turns out in a session, will appreciate to the full what such a service means. It was but just, therefore, that at the recent election of this same Committee, Mr. Hall's name stood at the top of the poll. In 1890 Edwin Hall was selected to represent the Institute before a House of Lords' Committee on a Bill affecting building, and for years he worked on the draft for a Bill to codify and amend Metropolitan Building Acts—a measure brought to fruition by the London Building Act of 1894. He was one of the three members of Council appointed to confer on this Bill with the London County Council, and to represent the Institute in Parliament; and the Corporation of London retained him as their Architectural adviser on the Bill when it was before the House of Commons; others interested having followed suit. If comparison be made of the original draft Bill of the County Council with the final Act as passed, a moderate idea of the work of modification and alteration will be arrived at, and how much study and technical knowledge is necessary to keep public bodies from violating the dictates of Building Science. Although these facts tend to prove the technical reputation of Edwin Hall; and although, as is not generally known, every single clause in the new Building Act came under his personal consideration, the artistic side of his capabilities must not be ignored. He has rather a fascinating method of preparing his drawings. First of all, his most constant companion is a sketchbook of goodly dimensions, and rumour says that it has been discovered under his pillow more than once. In this book is jotted down every Architectural "thought" that meets him. All his designs are first considered in it pages, first a sketch plan and then a sketch perspective, from which the geometrical drawings are afterwards made.

Mr. Hall does not profess to be *facile* with his pencil, but you have seen worse "facility" from men who do, and the charm of detecting the growth of a design, from a sketch, however rough, hidden away in these series of sketch books is not a very common pleasure. They contain designs for wrought iron grilles and railings, furniture and fittings, lamps, and Communion plate, and all the many details crowding in upon a busy Architect's consideration—even a suggestion for a new "manhole" has its pride of place. Last year Edwin Hall entered upon one of his rare competitive crusades and pulled off the Park Hospital at Lewisham, which will prove the largest work he has yet done; and the more honour to him, for it proves how an



AN INTERIOR OF "IVY HATCH."

A GREAT CONQUEROR'S TOMB.

THE first point one would naturally visit in Samarkand is the famous Gur Ameer, or Tomb of Tamerlane, which stands in a pretty little park on the edge of the Russian settlement. You pass a dilapidated archway—covered in part by beautiful tiles—lined with beggars, priestly or otherwise, and the Tomb of the great Conqueror stands before you. It is built of small, burnt bricks, and has very massive walls. Like the other historic remains of Samarkand, it is quite in the Persian style of Architecture. The apex of the Dome is about one hundred and fifty feet from the ground. The Dome, whose outline is very graceful, is spherical, and its surface is fluted or ridged, but its top has lost all its glazed bricks, and has been restored in plaster by the Russians. This white plaster is, of course, fatal to a fine general effect, and you accept its presence only as a cheap method of preserving the remainder of the work. The Tomb had evidently once four grand porticos on the four sides, probably with four minarets also at the angles. Only a portion of one minaret is now in position; it is round, smooth, slender and graceful. The colours of the glazed bricks are mostly light and dark blue, white, yellow, and green. The dark blue is, however, largely the predominant tint. Plain brown bricks often stand between the glazed ones, and afford a pleasing contrast. The bricks have a glazing like porcelain, which is about one-eighth of an inch thick. Sometimes the surface is smooth, with several colours running together; sometimes it is indented, or indented and raised, like a cameo, sometimes it is in low relief. But let us enter the Mausoleum, merely pausing to notice that there are small domed structures, right and left of it, containing tombs of some of Tamerlane's family, and of some of his high Ministers. At the entrance are small but prettily carved doors, and just within sits a molla, round about whom, on the walls, many Persian texts have been placed as vows by the faithful. The lower wall of the great Dome was once covered with finely carved slabs of alabaster, in the style of a deep wainscot, but these are now mostly lacking, and their place has been filled with ugly, glaring cement. The Dome is partially lighted by four openings near its spring, which have been filled in recent times with wooden screens perforated in ornamental designs. On four sides are high arched recesses with ceilings in the broken stalactite style so frequently observed in the Alhambra at Granada, and also in Mohammedan countries. On the floor a low, carved stone railing surrounds a number of tombs, or rather, cenotaphs—for the actual tombs are in a vault below—that of black marble in the centre being Tamerlane's. It is a long, narrow, and low block of smooth stone, with a bad fracture in the middle, said to have been caused by an earthquake. The other cenotaphs of special interest are of a greyish sort of stone. The pavement without the railing is of great blocks smoothly worn by the feet of pilgrims and travellers for several hundred years. In one corner near the entrance a rough flight of steps conducts to a low, dark vault, where are the true tombs. That of Timour is a yellowish marble slab, completely covered with inscriptions of raised Persian letters, which embrace many selections from the Koran and a genealogy of his family.

At an adjourned meeting of the Coseley Urban District Council, held at the Public Offices, Coseley, Staffordshire, on Wednesday, June 19th, tenders were submitted for altering and enlarging the Public Offices, building new Council Chamber, etc., from plans and specifications prepared by Mr. Chas. W. Shackleton, the engineer and surveyor to the Council. The tender of Mr. Thos. Jones, builder and contractor, Roseville, Coseley, Staffordshire, was accepted, and the work will be commenced forthwith under Mr. Shackleton's superintendence.

THE foundation stone of the new School Buildings which are about to be added to the Royal Medical Benevolent College, near the Epsom Downs, will be laid on Tuesday, July 9th, by the Prince of Wales. The original structure, to which considerable additions have since been made, was opened by the late Prince Consort about forty years ago.

METAL IN ROMAN BUILDINGS.

THE frequent use of the arch in Roman Architecture instead of beams and joists as now practised, and the frequent use of bricks, may serve to explain why metal was not more required in their building and great engineering works, such as the celebrated Stone Bridge over the Rhone, built in the reign of the Emperor Trajan, consisting of 20 arches, and other great works. That timber, however, must have entered largely into the construction of their buildings is shown from the conflagrations of their cities. Cæsar's Bridge over the Rhine, constructed when the Romans first invaded Germany, was made of timber, also the Pons Publicus at Rome. Although it is not easily ascertained from history to what extent iron was used in the construction of buildings by the Romans, and although from its perishable nature, it could not be expected that many of its applications would reach these times, yet there is ample evidence, from what has been shown, that its utility was appreciated, and its use common. It has been said that the large stones of the Aqueduct Bridge at Nîmes have been jointed together without cement by ligaments of iron. In domestic buildings iron was used, according to the Roman authorities, for many purposes, similar to those to which it is now applied, such as the making of nails, bolts, locks, hinges, hooks, pillars, gates. For the last of these probably bronze was more frequently used, as the two Gates of the Temple of Janus, which were opened in war and shut in peace, consisted, according to Livy, of brass. The Brazen Gate of the Pantheon is described to have been of great magnitude and fine workmanship. When historians have recorded that there were 420 Temples at Rome crowded with Statues, one may easily conceive that bronze casts would be extensively used. Even brazen columns or pillars were constructed at Rome, as the Columna Ænea. At the Columna Mænia, named after C. Mænia (A.C. 417), were placed the brazen beaks of captured ships.

"PRESENT-ABLE" ARCHITECTURE.

There is Poetry in Architecture and Architecture in Poetry. We are not aware that there is very much Architecture in this particular poem, but it comes from a Scotch friend, and is welcome. There are pessimists in the land of porridge.

Why should fine fancies e'er us haunt
On thinking out why should we wait;
Why study, when the thing we want
Is Architecture "Up-to-Date."

The subtle curve, long level line,
Did well enough with dullard Greek,
The sober Art of Auld Lang Syne—
What's wanted now's a startling freak.

Who cares for Order or for Law,
The "free" in Art's the latest style,
How'er detail be rude or raw,
Or misproportion'd be the pile.

All in-and-out and up-and-down,
No peaceful plane on which to rest
The eye; the thing's to "take the town,"
And give—of course—what pleases best.

To live to please, and please to live,
That's our philosophy to-day;
Why do the right that we may give
Delight, when only—we're away!

When dead, it matters not to us
What those who live may say or think,
We get the money now, the fuss
Of future fame's not worth its ink.

Glasgow, June 1895. G.

THE new Roman Catholic Church, erected at Retford, by the Dowager Duchess of Newcastle, was opened on Thursday last. The building is of iron, lined with pitchpine, which gives it a light appearance. It will be remembered that there was some hostility to the building occupying the site upon which it now stands, in Queen Street, West Fields; but the requirements as to the building line having been complied with, all further obstacles vanished, and the work was completed without further interruption.

ANOTHER "ELECTRIC" RAILWAY IN LONDON.

THE Central London Railway, for which three Acts of Parliament have been obtained, is now to become an accomplished fact. These Acts, passed in the course of the last three years, authorise the construction of an Underground "Electric" Railway, running in a line from Shepherd's Bush to the open space in front of the Mansion House and the Royal Exchange, and thence to Liverpool Street where, subject to arrangements being made with the Great Eastern Railway Company, it is proposed to construct a terminal Station underneath their terminus. By the system of constructing underground lines, so successfully illustrated in the Electric Railway running from the Monument to Stockwell, and by the line now actually in course of construction between the City and Waterloo, the new line will be carried out without the least disturbance of the streets, or any peril to property. The length of it will be six miles and a-half, and there will be fourteen Stations. Starting with Electrical Generating Works and a Station at Shepherd's Bush, there will be another Station at Queen's Road, and one at Holland Park. The next will be at Notting Hill Gate, another at Westbourne Terrace, and another at the Marble Arch. Running straight down Oxford Street, there will be Stations at Bond Street, Oxford Circus, Tottenham Court Road, the British Museum, and Chancery Lane. The line will run under the Holborn Viaduct, to Newgate Street, where there will be another Station, and thence with a slight twist—unless the alterations contemplated by the City authorities should first be carried out, in which case this curve will nearly disappear—into Cheapside. The next Station will be at the Bank, and thence the line will traverse the Royal Exchange into Broad Street and on to Liverpool Street, passing in its way under the Circle Railway.

Throughout its length the tunnels will be cut through the London clay. There will be two tunnels, as in the City and Southwark Electric Railway, but of larger diameter. They will be driven along by what is known as the Great-head Shield, on precisely the same system as is adopted on a gigantic scale for the Blackwall Tunnel. There will be no opening of the streets at all. Property will be purchased in accordance with the Parliamentary powers conferred for the Stations at the various points indicated, and from these various properties the tunnels will be driven, while the traffic overhead will go on quite undisturbed. From the West End to the City the two tunnels, one for the up line and one for the down, will run side by side. The engineers, however, are forbidden to go under any building, and in the narrow City streets there is not sufficient room to carry the two lines side by side. They are to run along therefore one above the other, the lower one going past Bow Church, Cheapside, at a depth of no less than 80 ft. below the surface of the roadway. Emerging in the open space in front of the Mansion House and the Royal Exchange, the new line is to bring about a remarkable London improvement. We all know the crowded and dangerous condition of the streets just here. Arrangements have been made with the Corporation by which the Company will be allowed to plant their Station underground in the middle of this space, on condition that they construct a spacious Subway for pedestrians all round it. This Subway will be 15 ft. wide, and will be accessible by easy flights of steps from all the surrounding thoroughfares. Foot passengers will thus be able to avoid crossing the roads at this point. A person may start at the Mansion House, descend a few steps, cross the end of Cheapside, of Princes Street, Threadneedle Street, Cornhill, Lombard Street and King William Street, and return to the Mansion House in perfect safety, while from this Subway he will also be able to pass down to the Station of the City and Waterloo line, or to that of the Central London Railway, which is to have, in addition to the several entrances at the end of the converging thoroughfares, two broad flights of steps leading down from each side of the pavement immediately in front of the steps of the Royal Exchange. The ground at this point

in the City, it need hardly be said, presents a wonderful tangle of pipes and drains and cables and wires, and for these also the new Railway has undertaken to make ample provision. Beneath the Subway for foot passengers will be another Subway about three times as large as will be required for taking in all the underground pipes and so forth, and which may therefore be expected to obviate any further disturbance of the roadway for generations to come. The main features of the new line will be those of the City and Southwark Railway, with such modifications and improvements as the experience gained by that undertaking has suggested. That line, it may be remarked, was originally intended for working by cable. Electricity was an afterthought. This new line is planned for electricity. The tunnels will be larger than the existing ones, and the trains, instead of accommodating 100 passengers each, as on the existing line, will be designed for 336. Special care is to be taken for the lighting of

the evening, but that the busiest parts of the day, both in and out, are the afternoon and early evening, from about three till six or seven that is. It is computed that between the City and the Marble Arch people take about 300,000 rides daily. The promoters of the new line are of course hoping not only to get a large share of this traffic, but to create something of that morning and evening influx and outflow which at present appear to run in other channels.

The development of a habit of travelling is one of the most interesting phenomena of modern London. This was very strikingly brought out in evidence taken by a Committee of the House of Commons in 1890. It was then shown that in 1867, when the population of the Metropolis was about three millions, the total number of passengers carried by the Metropolitan and District Railways and the omnibuses and trams was upwards of sixty-four millions. In 1889, with a population of four millions, passengers were nearly 422 millions. Popula-

by adopting it, and have resolved to spend three and a-half million dollars in effecting the change.

AN extension of the Antley Wesleyan Chapel, Accrington, which will cost £2,700, has been commenced.

It is proposed to erect in St. Peter's Church, Oxford Street, Newcastle, some permanent Memorial to the late Canon Raines, who, for so long a time, was Vicar of St. Peter's.

ON Tuesday afternoon, Bishop Wilkinson consecrated the English Church of St. John, this being the first consecration by an English Bishop at Boulogne. The event created considerable interest in the town. The Church cost £6,000.

WHILE removing a hedge at Thornham Farm, Witheridge, Devonshire, a labourer discovered three common earthenware pitchers, the total weight of which, when empty, is about 60 lb. They contained a number of silver coins dating



Stations and carriages—a point in which the City and Southwark has been very defective from the outset. The Stations are to have staircases as well as hydraulic lifts, and it is intended to keep up a service of trains at intervals of about two minutes and a-half throughout the day, the whole journey from end to end occupying about twenty-five minutes. The Company have taken very elaborate pains to arrive at precise ideas of the great human tides which sweep up and down the main thoroughfares they propose to traverse. They have employed a large staff of officers, some of whom have been stationed at numerous points along the route, while others have spent weeks in riding to and fro in omnibuses, all of them tabulating figures showing how many rides people take over various portions of the route. These results have been set forth in scientific curvilinear form, and curiously enough they appear to show—not as on London Bridge and some of the Railways, a stream into town in the morning and a stream out in

tion had increased by a third; but travellers had multiplied sevenfold. It is evident that the establishment of a new service creates a new travelling public, and this, it is safe to assume, would especially be the case with such a service as that proposed and along such a route. For a passenger line there is nothing comparable to it in the World. As we have shown, recent engineering achievements have quite disposed of all practical difficulties in the carrying out of the line, and electricity as a motive force tends continually to become cheaper. The cost per train mile on the Liverpool over-head line has been reduced to 3½d. or 4d., and on the heavier City and Southwark they are, we understand, now working at a fraction under 6d. So important are the reductions already effected considered to be, that the Manhattan Elevated Railway of New York, which carries over 200 million passengers a year, and which only a year or two ago, after exhaustive enquiry, pronounced against electricity as too costly, have now decided that they can effect a large saving

from 1600 to 1650. The coins were of the sizes of a florin and half-crown, but much thinner.

It has been decided to erect in Paris a Statue to the memory of Victor Hugo. The situation selected is the Square in the centre of the Avenue called after the poet, and near the house where he died. The subscription list recently opened for this purpose has already reached a total of many thousand francs.

IN sawing through a white oak log, 3 ft. in diameter, a few days ago, a sawyer at Blanchester, Ohio, came across the date 1780 carved in the wood near the middle of the log. The figures were very distinct. The carving was, doubtless, done when the tree was young, and in some way the wood grew around and over it without filling up the carved furrows.

ON Thursday last was laid the Memorial Stone of a Free Library and Reading Room at Abingdon, which is being erected at a cost of about £2,000 by the Governors of Christ's Hospital.

EARLY RAILWAY REMINISCENCES.

THE Railway Exhibition at the Imperial Institute, has inspired some one to make the excellent suggestion that a Railway Museum should be established. It is rather a matter of surprise that so obviously interesting a collection has never been thought of before. Materials must surely be abundant enough. It is said that some of the earliest carriages built by the South-Western Company have been discovered by Mr. Sekon, who describes them as being of the most primitive construction. Seriously speaking, a collection—if it could be made—of specimens of the earliest Railway carriages would be extremely interesting, and would probably astonish most present-day travellers by the iron road. Third-class passengers, especially on the northern lines, travel now in comfort, which is perfect luxury compared with what their predecessors had to put up with in the early days of steam transit. Third-class carriages on most lines, fifty odd years ago, were simply what we should now call cattle-trucks. They had neither roof nor seats. Some of the trains in these early days had a seat for the guard placed outside and above the last carriage. There he perched, commanding a view of the whole train, and thence he applied his primitive brake. Something similar to these perches for the guard may still be seen in use on the brake-vans of goods trains, if not of passenger trains, on the Western Railway of France. Specimens of these various kinds of early railway carriages, if it be still possible to unearth any of them, should certainly find places in the proposed Museum. But if there are none preserved, it should still be possible to construct models thereof from old drawings, or from the recollections of those among us—a rapidly diminishing class—whose memories of the first beginnings of railway travel are still green. Another obsolete class of carriage, which should be represented in the Museum, is the covered vehicle which had iron rails round the top to protect the passengers' luggage, which in the early days was packed upon the roofs of the covered first and second-class carriages. Examples of coaches of this kind with their luggage-laden roofs can be seen in the once popular engraving of Mr. Frith's picture of the Railway Station. But the Railway Museum need not confine itself to obsolete types of conveyances. Possible objects of interest are very numerous. There are the tickets, for example. Has anyone, we wonder, in these days of collecting mania, been able to bring together a collection of early Railway tickets. Just as the practice of placing luggage upon the roof of the carriage was a survival of the stage-coach system, so the first railway tickets were paper vouchers such as had formerly been issued to travellers by coach. The passenger gave the booking-clerk the fare, together with his name and address, which were duly recorded, and received in return a paper receipt torn from a book in which the counter-foil remained as a permanent record of the transaction. The system was very cumbrous, and naturally soon disappeared as railway travellers multiplied. Some of these elaborate vouchers are still in existence, and should certainly find a home in the Museum. Another very interesting section would contain specimens of the first time tables issued for the guidance of passengers, together with copies of the early editions of "Bradshaw." It would probably be difficult to discover many ancient time-tables, but at least one, containing the trains between Liverpool and Manchester in January, 1831, has been preserved. From this it appears that trains started from both ends of the line at the same time, meeting and passing about half-way between the two towns. There were four first-class trains daily—at 7 and 10 a.m., and at 1 and 4 30 p.m.; but only two second-class, at 8 a.m. and 2 30 p.m. respectively. But at the bottom of the bill it was announced that—"In addition to the above trains it is intended shortly to add three or four more departures daily."

THE Eastbourne Guardians invite tenders for painting and cleaning works at the Work-house Infirmary. Specifications may be obtained at the office of the Architect, Mr. F. E. Cooke.

MAGNITUDE IN ARCHITECTURE.

IN placing Sculpture in juxtaposition with Architecture, it is obviously a point of no small importance to consider the scale thereby imparted to the composition. It will hardly be necessary to demonstrate with argument that with which every artist must be acquainted, namely, that magnitude is relative rather than actual, and that by skilfully proportioning details, or by placing in juxtaposition features with the size of which by habit, experience or instinct we are acquainted, with those of which we have no other data for determining the magnitude, the artist can impart a fictitious scale to his composition; or that by diminishing one feature and exaggerating another, he can, by this comparison, produce an idea of magnitude which the actual size does not possess. In practice this has but too frequently been lost sight of, and in many instances where circumstances institute the comparison it has been rather the result of accident than design. Perhaps this remark might be more justly restricted to the revival and later production of Art, since in the works of the Antique we continually observe not only its application, but the success with which it has been attended. The principle must, however, obviously become of peculiar importance in the case of Sculpture, since the proportion of the human figure is that with which we are most naturally and necessarily acquainted, and one which we perhaps more readily apply than any other (adjusting everything to this scale instinctively); and, although to a certain extent, the scale of the sculptural accessories, particularly the isolated figures, will be indicated by various circumstances in the proportions of the Architecture, it is not absolutely or invariably so, and the advantage to be gained by skilfully adjusting this scale must never be lost sight of. When, by being in due proportion to the members of the Architecture, it would become too colossal, it might be preferable to adopt a different species of decoration, since, where the ordinary features of the composition are merely increased in actual size, and the same relative proportions observed, the scale by which we measure is increased in nearly the same ratio. We may also observe that the undue exaggeration of the human figure beyond its natural proportions, so far from invariably producing an effect of grandeur, is sometimes productive of impressions akin to those resulting from actual deformity; the proportioning of these parts is, however, a point which must depend solely upon the judgment of the artist, and one for which no rule can be laid down. A careful study of the best models, and an accurate observation of works already executed, will form the best and perhaps the only guide.

THE CHARTERHOUSE.

AS another result of the Agricultural depression, the number of pensioners at the Charterhouse, which used to be eighty, but was reduced ten years ago to fifty-five, must be still further reduced, writes Mr. Walter Besant, unless the Governors make up their minds to continue the Charity by selling the site and the buildings. Many of the farms belonging to the Charity are paying no rent at all, and things are going from bad to worse. Since the whole country is going to certain wreck and ruin, as a natural consequence of the agricultural bankruptcy, it must be expected that our charities will disappear first. But to sell the Charterhouse! Heavens! The very thought makes one tremble. To sell the Charterhouse—that ancient and venerable place—one of the few monuments of the past that have descended to us! Stand within the first Court—there are two Courts left of the old Monastery—and look round. The place was founded by that gallant knight, Sir Walter Manny. First he gave the City a new Burial Place. It is now called Charterhouse Square; it contains the ashes of a hundred thousand London citizens; they died of the plague. Disturb not their ashes lest you revive the plague bacillus. Sir Walter gave a Chapel to this Cemetery; he then built beside it a Monastery of Carthusians—that rigid and austere Order. In his own Monastery he lies buried, the King and bishops and the barons of England attending his funeral. After 200

years the Brethren—a harmless, holy, austere, bigoted company—were driven out and executed with a horrible brutality which makes the blood boil. Then the Duke of Norfolk had it—I believe that he built the present State Rooms; and then Sutton converted it into the noble charity which still exists. One thing it has lost—the boys. It was a wicked and a cruel thing to take the Charterhouse School from its own place. We had enough mock Etons already; it was a City School, and belonged to the City. They pretended, I believe, some nonsense about health; that it was mere pretence was shown by the Merchant Taylors' School taking the place of the old School directly after it was taken away. The old almsmen, the boys, the memory of the dead, the Chapel, and the Hall made up one harmonious foundation—and they spoiled it.

TRAINS TO PASS OVER EACH OTHER.

THE specification of the United States patent, dated March 25th, 1895, is an interesting bit of engineering literature, designed to secure legal protection for the very simple method, proposed years ago, of enabling two railroad trains to pass each other on the same track without collision. The frequent attempts of trains to thus pass each other have been attended so uniformly with disastrous consequences that the feat has become pretty generally recognised as an impossible one, and most engineers have concluded to desist from further efforts to accomplish it. The plan now proposed in all seriousness seems to be the exact counterpart of the one which was mentioned in 1893, and of which the appended particulars may be of renewed interest at the present time. The idea is altogether very simple, as most really great plans and ideas are. The inventor of earlier years proposed, as the present one does, to place on the front of every locomotive going in one direction a long, inclined plane and on this were to be two rails. These were to come close to the regular track at the forward and lower end of the plane, and at the upper end were to be connected with other rails running along the tops of the cars and down to the main track again on another inclined plane at the rear end of the train. When the train provided with this attachment would meet another train on the same track, the latter would simply go over the former, its weight making the connection of the front of the inclined plane and the rails on the main track perfect, and acting, at the same time, as a brake on the speed of the train underneath. It is, of course, perfectly evident that if this invention had been properly appreciated and generally adopted, the number of double-track roads the World over would not now be half as great as it is. A single tract, with occasional switches for heavy freight trains, would have answered all purposes, and the cost of building railroads would have been decreased by an important percentage. The project is truly American.

THE Standing Joint Committee of the County of Aberdeen has decided to erect new Police Stations at the following places and cost:—Culter, £1,017; Insh, £631; Ellon, £604; Strathdon, £691. The plans are by Mr. J. D. Watson, C.E., County Buildings, Aberdeen.

THE Queen was present at the formal opening of the new Parish Church of Crathie, on Tuesday last, of which her Majesty laid the foundation-stone about two years ago. The new edifice is within a stonethrow of Balmoral, and occupies the site of the former place of worship. It is designed in the Early Scottish style of Architecture, and takes the form of a Cross, with Nave, Apse, and Transepts. The South Transept is set apart for the Queen and members of the Royal household, while the other on the North, facing it, is reserved for the Heritors of the Parish.

Professional Items.

New infants' departments of the Churchgate Board Schools were opened recently at Loughborough. The building is a substantial red brick structure, with overhanging eaves, roofed with grey Welsh slates. It is situate on the east side of the passage leading from Church Gate to Baxter Gate, and contains large School Room, 62 ft. by 23 ft.; two Class Rooms, 19 ft. by 18 ft., and 16 ft. 6 in. by 18 ft. respectively, and a Cloak Room, 23 ft. by 10 ft. 6 in. The flooring is of 2 in. red deal blocks, and there is a glazed brick dado to the walls. This is utilised for the window sills, by having the top course of bricks glazed throughout. The ceiling is 21 ft. to the roof line, and 13 ft. 6 in. to the tie beam, the roof above the latter being of an open design, with woodwork of varnished deal. Glazed screen doors divide the Class Rooms from the main apartment. Accommodation has been provided for a total of 240 infants, boys and girls. The whole building, including Cloak Rooms, is to be heated with hot water, the apparatus having been fixed by Messenger & Co., Loughborough. The general contract was let to Messrs. T. Barker & Son, for the sum of £1,700. The Architect was Mr. George H. Barrowcliff, A.M.I.C.E., of Loughborough.

The old Schools attached to St. John's Church, Park, Sheffield, have been enlarged at a cost of £2,000. The Schools will accommodate 300 girls and 300 boys. The girls are to be on the lower floor and the boys on the top floor, and for each department there is a School Room and four Class Rooms, with Cloak Rooms, and Teachers' Room. The rooms are 14 feet high, and are heated with slow combustion open fire grates. The Class Rooms are divided from the School Rooms by glazed pitch-pine partitions. The ventilation is good, and all the rooms are exceptionally well-lighted. A room with a range in it has been set apart for the girls to learn cottage cookery. Mr. Joseph Norton was the Architect, and the work was carried out by Mr. George Webster.

The new School at Keir Street, built by the Barnsley School Board, was recently opened. Great difficulties have had to be overcome in connection with the erection of the Schools. A site was first obtained at Old Town, opposite the present Infants' School there, but when the building had fairly begun to rise, the site began to sink, and the walls to crack, so that it became necessary to remove the building to another place, and the present site was then obtained. The Schools, admirably designed, well lighted, outwardly imposing, inwardly bright and cheerful, are from designs of Mr. C. Robinson, Architect, and are intended to accommodate about 300 children, with ample provision of Cloak Rooms, Playground, &c. Architecturally and in every other respect the buildings are a conspicuous success. The cost of the Schools had been:—Site, £393 10s.; total amount of contracts, £2,726; furnishing, cost of asphaltting the yard and making the street, £645 10s.

Two Tablets have been erected by Lord Donington, in the Parish Church of Castle Donington. The Tablets were designed by Messrs. Pugin, and are highly decorative in character, each being different in design.

The Church of Holy Innocents, Selhurst Road, South Norwood, will be opened to-morrow. Messrs. Bodley & Garner, are the Architects, and the builders Messrs. G. F. Smith & Sons, Milverton, Leamington. The stone used was supplied by the Bath Stone Firms, Limited, Bath.

BUILT by the workmen of the Londonderry Bottle Works, Seaham Harbour, to perpetuate the memory of their late employer, the Robert Candlish Memorial Hall, is to be opened on Saturday by the Marchioness of Londonderry. The Hall is built with red bricks, having terracotta mouldings, head-pieces, and other ornamentations. There are reading, game, and Conversation Rooms, and a large Room for Assemblages. Portraits of the deceased Robert Candlish and other personages distinguished in Science, Art, Engineering, Literature, &c., adorn the windows and the interior of the building. The Architect is Mr. Frank Caws, of Sunderland.

A NEW Board School was recently opened at Chesterfield, in which provision has been made for 280 children, at a cost of about £3,910. Messrs. C. Rollinson & Sons were the Architects, and Mr. W. Forrest, Chesterfield, the Builder. Separate playgrounds are provided for the boys and girls.

A HANDSOME Mission Church, which has been erected at Caddy Field, as an offshoot of the Halifax Parish Church, was dedicated on Wednesday last. The estimated cost, including site, is about £1,200, and the accommodation 250. Mr. W. Swindon Barber, of Halifax, is the Architect.

UNDER the superintendence of Geo. H. Fellowes Prynne, Esq., a Stained Glass Window has been designed and executed for East Antony Church, Cornwall, in memory of William Henry Pole-Carew of Antony. The centre light is a "Nativity," the two side lights being "the Adoration of the Magi" and "the Shepherds" respectively, with backgrounds of colour, no landscapes or perspective being used. The whole is enclosed in a setting of elaborate tabernacle work. The designing and execution were entrusted to Messrs. Percy Bacon & Brothers, of 11, Newman Street, London, W.

ADDITIONS are about to be made to the Victoria Hospital, Bromley, at a cost of £550, for which Mr. W. H. Colbran is the Architect.

MESSRS. A. WATERHOUSE AND SON, Architects, have prepared plans for additions to the Manchester Town Hall.

THE new Church erected by the Albion Independent Congregation, Ashton-under-Lyne, was recently opened. It is a large and beautiful building, in the Early Perpendicular style. A Tower and Spire which rise to a height of 200 ft., form a striking feature of the edifice. The total length is 174 ft., and width across Transept, 117 ft. The stained glass Memorial Windows were designed by Sir Ed. Burne-Jones. Building—began five years ago, on a site which is the best in the town—has cost nearly £50,000.

IT has been decided to add a Chancel to S. Mary's Church, Todmorden, of such a style of Architecture as to suggest the advisability of a new Nave at some future time. Three or four Architects are to be invited to compete. The Church occupies the most commanding site in the centre of Todmorden. The work, which will cost about £1,000, is expected to be done this year.

THE three windows recently dedicated at St. Hildas Church, Sunderland, form part of a scheme to be carried through the whole Church, commencing and ending at the East Window. The subject is "I am the vine ye are the branches"; the vine treated extending through all the lower lights, with figures standing on the branches and returning in the opposite direction in the upper lights.

THE Library, Museums, and Arts and Technical Instruction Committee will recommend to the Liverpool City Council at their next meeting "That the Special Sub-Committee appointed by this Committee on the 20th November, 1894, to report as to the extension of the Museum buildings be re-appointed, and that they be instructed to prepare conditions under which the premium, authorised by the Council, for designs of the proposed extension, should be offered."

THE Local Government Board, in reply to the application of the Wandsworth and Clapham Guardians for sanction to the purchase of Tooting College, at a cost of £40,000, for the accommodation of the aged and infirm, state it is advised that in consequence of the original design of the College having been for one sex only, it would be unadaptable for the use of both sexes. It would not consent to bedridden persons being retained in the buildings; but having regard to the great necessity for increased accommodation being provided, the Board would not refuse its consent to the purchase of the College. It has been decided that the Architects of the two Boards should consult as to the necessary alterations.

OUT of a number of applicants, Mr. H. Richardson, Assoc.M.I.C.E., Town Surveyor, Oldbury, has been appointed by 21 votes out of 25 to be Surveyor to the U.D.C. of Aston Manor.

FOR the erection of St. Wilfred's Church, The Boulevard, Hull, the tender of Messrs. Colley and Levitt, of Hull, for £3,222, has been accepted. The Architects are Messrs. Smith, Brodbrick, and Lowther, of Hull.

THE Markets and Public Halls Committee of the Chesterfield Town Council has recommended that the Council adopt the plan of the borough surveyor, and approved by the Architect, whereby the whole of the interior of Stephenson Hall will be utilised as the auditorium, with Dressing Rooms, at a cost of £1,500, and that application be made for a loan for carrying out the scheme and the erection of a Caretaker's House, at a cost not to exceed £200.

THE proposed extension of Shieldhall Hospital, Govan, comprises four small Probationary Wards at a cost of £1,350, a new Smallpox Pavilion at a cost of £2,800, a new Scarlet Fever Pavilion at a cost of £2,350, and an addition to the administrative block at a cost of £750. The Burgh Surveyor has been instructed to prepare working plans.

A COMPETITION has recently taken place for a large block of buildings to be erected at Preston by Mr. N. Miller at a cost of about £50,000. The block includes an Hotel, two Arcades, and a number of Shops, and is to be erected on an important site, bounded by Church Street, Lancaster Road, Jackson Street, and Birley Street. Three prizes were offered, and the first prize of £150 has been awarded to Messrs. Essex, Nicol & Goodman, of Birmingham, the Architects of the Technical School and new Dead Meat Market. Mr. Salomans, of Manchester, acted as Assessor in adjudicating upon the designs. One of the conditions to be fulfilled was that in the event of any internal or partition wall having to be removed at a future time, such removal should be no detriment to the stability of the structure.

ON Wednesday last, the Stoke Rural District Council met to consider the twelve applications for the post of Surveyor to the Council and Engineer to the Bucknall Sewage Scheme. In the end it was announced that Mr. Larnar Sugden, F.R.I.B.A., had been unanimously elected, and he will forthwith open an office in Hanley or Stoke for the transaction of his duties.

THE Local Government Board intimating that after considering the report of its inspector they had sanctioned the Council's application for a loan of £5,000 for erecting a new Library at St. Philip's. Plans have been prepared by Mr. Gough, Architect, and tenders for the new building will be immediately invited. The site of the new Library adjoins Holy Trinity Vicarage in the New Road, the Committee having the land at a rental of about £15 a year from the Ecclesiastical Commissioners. The Reading-Room will be 70 feet long by 40 feet in breadth, and the floor will be laid with wood blocks in herring bone pattern. The various departments will be on the ground floor, and all the equipment will be of the most modern type.

WE understand that the design adopted by the Tramways Company for the building proposed to be erected at S. Augustine's Bridge Bristol, was selected from among several sent in by local Architects. It was at first thought that a building costing about £1,000 would answer the purpose, but having regard to the importance of the site, the directors decided eventually to go to an expenditure of £5,000, so as to secure a better class of building, and one that would be an ornament to the locality.

THE East Grinstead Urban District Council has instructed their Surveyor, Mr. William Willis Gale, A.M.I.C.E., to prepare specifications and take out quantities for an Infectious Hospital, to be erected according to his plans at an estimated cost of £3,000. The Local Government Board has held its enquiry, and sanctioned the loan.

NEW Church Day Schools, to accommodate 570 girls and infants, are about to be erected in St. Mark's Parish, Wolverhampton, from the designs of Mr. Joseph Lavender, F.R.I.B.A., Architect of that town (such designs having been selected in competition). The builder is Mr. Henry Gough, also of Wolverhampton, whose tender for the whole of the work (exclusive only of furniture and fittings) is £2,000.

THE ARCHITECTURE OF MANCHESTER.

BUILDINGS IN PROGRESS.

WE are glad to note that Manchester is rousing herself to the importance of Architectural and Sanitary questions. In a contemporary, the following keenly critical comment upon current Architecture in the City appears:—The site of Messrs. Constantine's Baths and Office, Manchester, is conspicuous, and the requirements lend themselves to a picturesque treatment of that corner. The building, unfortunately, has obviously not been designed in perspective. The front to Oxford Street presents a very tolerable elevation, though sham gables are put in with a mistaken idea of thereby improving the appearance. The St. James Street side appears like parts of three different and mean-looking buildings, instead of making an effective part of a picturesque and dignified whole. The chimneys, too, are not made to contribute as they might and should to the general Architectural effect. With more painstaking but without more expense, this building, with its special requirements and conditions—all favourable to real artistic effect—might have been a great gain to our street Architecture. As it is, even the Oxford Street front is marred by the rear parts of greater height, which are very conspicuous when the building is seen from a little distance, and in which there has been no attempt at design—probably because it was thought that it would not be seen. This ought to have been tested on paper before being put into work. The corner block No. 12, Mosley Street, looks, with the sun upon it, bright and pleasant in the freshness of its new stone. How long will it be before the smoke and dirt are so engrained as to induce the wish that it was of washing material? The design, though not mean, is distinctly commonplace. At the best it is inoffensive, at least as to the Mosley Street front and part of the side. A little way down the side street the stone changes to brick with objectionable suddenness. Here, too, advantage has not been taken of the dormers in the roof to get from them help towards a picturesque skyline. Nor are the chimneys made to contribute to what with a little more imagination and skill, yet again without more expense, might have been a marked improvement to Mosley Street. The important point of name-boards that meet commercial needs and which yet form a part of the Architectural design has been left very much to chance and the tenant. There is a new front in King Street, between Cross Street and Deansgate, that attracts the eye as being a little out of the common way, and which also shows care and good taste on the part of the designer. Perhaps there was no liberty to make it hold up its head higher. The way the name is carved in low relief on the front is good. So are the twin gables. So are the roof dormers. But the prevailing fault in shop fronts is to be found here—that is, the heavy superstructure standing on a void. The new stone building at the corner of Cross Street and King Street for the Alliance Assurance Company is far enough advanced to justify a word of criticism. The general outline as exhibited in the sketch is much more satisfactory than the instalment of executed work. The ornament is coarse and yet feeble, as if the designer were afraid of his own handiwork. It makes one long for such a master-hand as that of the late Edward Walters, or for such treatment of street Architecture as the new Public Library at Chelsea, where there is power, boldness, strength, delicacy, freshness of design, simplicity, and absence of the commonplace. It was said at Liverpool lately by a very eminent authority that when an Architect cannot design he "descends to ornament." Of this we see abundant examples in Manchester. The Chelsea Library proves (if proof were wanting) that a building may be graceful and beautiful with little or no "ornament" about it. In a narrow street like King Street a building wants all the light it can get. In that at the corner of King Street and Cross Street much of the most valuable part of the windows on the first floor is obstructed by heavy mullions, which look ugly and make one wonder what possessed the Architect to put them there. The new Temperance Hotel in

Deansgate has good, bold design in its main lines. It is a pity that it has the very common fault of crude, ill-designed detail. If the mouldings and ornament had been of the highest class they need not have cost any more to execute—perhaps even less. We watch with interest the progress of the Rylands Library in Deansgate. In some cases at least, less costly work would have been for the advantage of the building. The site is much too confined a site for such an important and costly building, and the few great windows should not be blocked up, as they are, by very close and intricate tracery. It darkens the rooms and catches and retains the dirt. Mr. Champneys has not observed that in these great smoky cities soot lodges on strings and on window sills, and when the rain comes it is washed down the walls, producing an effect like tears on a chimney-sweep's face. There are, of course, means to prevent such disfigurement, but Mr. Champneys has not used them. The colour of the stone of the Rylands Library is delightful. But will there in a few years be on the outside any trace of its present charm? In several other recent buildings in Manchester a warm-coloured stone has been used with admirable effect. If the stone stands well, the only thing to be alleged against it is that the brightness of its early days will so soon be lost. There is a welcome movement in parts of Manchester in the direction of wider streets which should by all manner of means be encouraged.

ISLAY STONES AND CROSSES.

IT is round the walls of the Cathedral at Iona, that the best known examples of the Carved Crosses and Monumental Slabs peculiar to the West of Scotland are to be seen. There are, however, several hundred other specimens scattered throughout the burying-grounds of Argyllshire, and not a few in neighbouring counties. In "The Carved Stones of Islay," by Robert C. Graham, F.S.A., a work recently published, a selection is made from the island of Islay. Islay is rich in interest to those who concern themselves with the relics of early times. Besides Chapels and graveyards, there are some twenty-two hill forts and sites of forts, mostly in three principal groups, each of which is contained in a circle of less than six miles diameter; as well as the remains of later fortifications once held by the Lord of the Isles. The Islay stones include a remarkably large proportion of crosses, many of which show exceptionally good work; for, generally, more care seems to have been lavished upon crosses than upon tombstones. Some of the carvings are "works of Art in the fullest sense of the term. The stones belong to various periods. There are little crosses rudely cut on undressed slabs of stone, and these are probably the most ancient. Then in the crosses of Kildalton and Kilnave, and in the cross-bearing slab found at Doid Mhairi, now in the garden at Ardmersay, there are examples of a style which seems to have been directly derived from Ireland; but far the greater number belong to the thirteenth, fourteenth, and fifteenth centuries, when the Art assumed and retained its special Argyllshire character, the plaited work of the Irish monuments developing into the richly foliated scrolls which form one of the great beauties of the West Highland carving. . . . There are a few bearing dates of the seventeenth century. In some cases they are old stones adapted; but others seem to have been carved at that time, and these show the decadence of the Art, the designs being plainly the work of artificers who had lost the former skill, their productions only emphasising by contrast the beauty of the earlier specimens." Between the hand of time, the iconoclastic spirit following the Reformation, the vandalism of the tourist, and other thoughtless depredators, the Argyllshire stones appear to be in a deplorable condition. They cannot be figured and recorded too expeditiously.

It is announced that the Duke of Norfolk has just given the sum of £10,000 to the building fund of the New Roman Catholic Westminster Cathedral, and twenty-seven "founders" have each subscribed £1,000, in addition to which £12,000 has been given to Cardinal Vaughan by another donor for one of the Private Chapels to be erected in the building.

SAWDUST.

MR. JAMES DIGGLE, C.E., F.G.S., of Heywood, has been appointed Engineer of the Milnrow (near Rochdale) Sewerage Scheme.

THE Monument commemorating the hundred- and fiftieth anniversary of the capture of Louisburg, in Cape Breton Island, by the New England forces from the French was unveiled on Tuesday last. The Monument has been erected by the American Society of Colonial Heroes.

A MOST interesting Home Arts and Industries' Exhibition has been held at Crompton. Among the most interesting of the exhibits was the beaten copper work, from designs by Mr. Alfred Waterhouse, R.A., done at the Classes at Yattendon Court, his fine country residence. There were also examples of Pottery, Leather Work, and Carving, &c., from Helensburgh, Gorebridge, Kirkly, Lonsdale, and Windermere.

THE Local Government Board has intimated to the Middlewich Urban Council that it has sanctioned the borrowing of £12,000 for the purpose of providing a new Water Supply to the Town, which is greatly needed. The Urban Council is giving £2,550 for purchase of land in connection with the scheme.

THE Corporation of Burnley proposes to borrow about £70,000 for various schemes. Of this sum £30,000 is for surface water drainage; £16,000 widening main street; £12,000 building new Refuse Destructor and Health Depot; and £5,000 for extending Electric Light Works.

It has been decided to take down the present Church of Holy Trinity, Southport, and to rebuild it on a slightly enlarged site, wholly within the limits of the present churchyard. The cost is estimated at £16,000, but it is not proposed to carry out all the sections at once.

In connection with the use of the prismatic compass, a correspondent informs us that on one occasion, when surveying with that instrument, the assistant in charge of the survey, found that the angles taken were incorrect, but upon his suggesting that the operator should remove his hat, the instrument was found to give proper readings. Upon examination it was found that a piece of wire ran round the brim of the hat to give stiffness, and was the cause of the trouble.

THE Portuguese Chamber of Deputies has been destroyed by fire. The Galleries of the Archives were consumed. The fire was due to the carelessness of a workman who was doing some soldering work for the repair of the glass Dome which surmounts the Chamber. The man went to his dinner, leaving his brazier burning, and the fire caught some of the wood-work of the roof. Four persons were injured.

SIR FREDERICK LEIGHTON has returned to England from Brittany in, we trust, much better health. It is hardly probable, however, that he will undertake the arduous duty of receiving the guests at the Royal Academy Soirée, which is fixed for July 2nd.

THE Bridges Committee of the Glasgow Town Council has instructed Mr. White, the Master of Works, to prepare plans and get estimates for the erection of a new Stone Bridge to be built at Govan Street at the Green. It has also been decided to prepare plans and get estimates for the erection of a Suspension Bridge further up at the bend of the river leading across to Oatlands Square. As this Bridge would take the place of the ferries, it would be a great saving and advantage to the many who cross the river at that point.

THE Marchioness of Lorne is a regular workwoman when she is Sculpturing. She tucks up her sleeves, covers up her dress with a large white apron, and sets to work in the most business-like way. Lately she has been devoting her attention to animals, and has made some very successful pieces of Sculpture from living models.

MESSRS. BEMROSE AND SONS, LTD., of Derby, are about to erect extensive works, and have accepted the following tenders: Ford and Co., Talbot Street, Derby, £10,559; wrought-iron work, Eastwood, Swinger and Co., Derby, £1,342; cast-iron work, William Abell, Brook Street, Derby, £769; heating, J. King, Ltd., Liverpool, £785; new Engine Houses, Ford and Co., Talbot Street, Derby, £693. Mr. E. R. Ridgway, of Long Eaton, is the Architect.

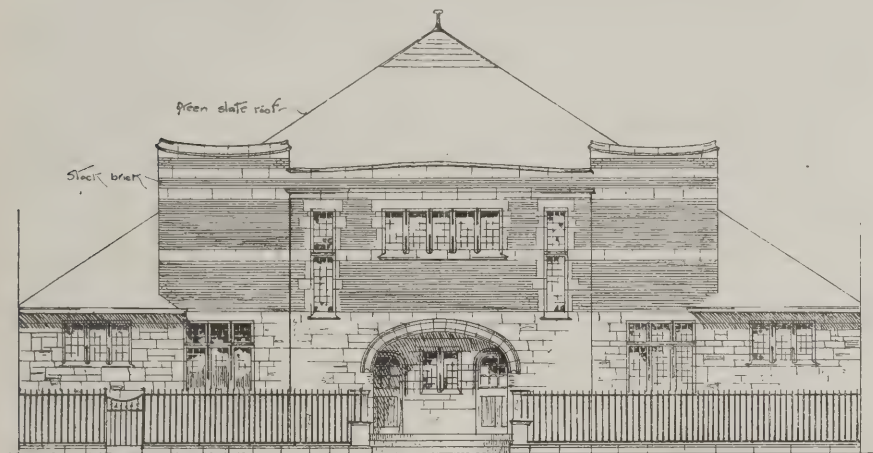
THE COVENTRY COMPETITION.

MR. CHARLES BARRY'S REPORT.

MR. CHARLES BARRY, the Assessor appointed to assist the County Council in the conduct of the competition for designs for Municipal Buildings, having carefully inspected the drawings sent in, prefaces his

sections as required, with little, if any, derangement of business. The warming and ventilating arrangements have received very careful attention, and in an artistic view this design would harmonize better than most others with the old buildings of St. Mary's Hall, which are in any case to be retained and to form part of the Municipal Buildings of the future."

OUR SWIMMING BATH COMPETITION: DESIGN BY "MYRON."



Elevation to Street

report by saying that many of the designs displayed much ingenuity in dealing with a very irregular site and with the ancient buildings to be retained, and that consequent on such ingenuity it had been found possible by most of the competitors adequately to provide the accommodation required in the Instructions, and which have been satisfactorily complied with generally. "I have selected three designs," says Mr. Barry, "and advise the Council to award the premiums to them in the following order:—For the design marked 'Leofric the Saxon' the first premium of £150; for the design marked 'Red Crescent' the second premium of £50; for the design marked 'Advance' the third premium of £50. All have been carefully adapted to the area and peculiar shape of the site, and with each design there is a detailed report, dealing carefully with the several points referred to in the Instructions. No contemplated cost was named in the Instructions, and the competitors have treated this question by using various rates per foot cube in making up their estimates. The authors' estimates of the above three designs are as follows:—'Leofric the Saxon,' £33,668; 'Red Crescent,' £33,915; 'Advance,' £27,891. The cubes sent in by the authors, as required by the Instructions, have been carefully checked, with the following result:—'Leofric and Saxon,' author's cube, 872,264, cube as checked, 904,681; 'Red Crescent,' 922,700, 948,451; 'Advance,' 979,387, 804,604. It will be noted that the cubes of the two first designs, as submitted by their authors, are rather understated, though not to a material extent. The cube submitted by 'Advance' is, however, larger than from the drawings. I think it would not be safe to estimate the new building at a less rate than 10d. a cube foot taken all over, but as to this the Council will no doubt be advised by its officer, the Surveyor who would necessarily have more local experience as to cost of buildings in Coventry. But assuming that a rate of 10d. a foot is fairly correct, the probable cost would work out thus: 'Leofric' the 'Saxon,' £37,695; 'Red Crescent,' £39,519; 'Advance,' £33,525. It is right, however, to say that though the design 'Advance' is good in arrangement and of considerable merit in design, and, therefore, deserving of a premium, the author has taken too small a ratio for the sizes of many of the apartments, and if this design was to be executed its cube contents would have to be somewhat enlarged, and its cost would probably then approximate to that of the other two designs. I have no hesitation in expressing my opinion that the design marked 'Leofric the Saxon,' is decidedly the best of all those sent in. It could be carried out readily in

SAWDUST.

It is proposed to rebuild the Redcoat Schools, Stepney Green, at an estimated cost of £3,000.

The Dewsbury Board of Guardians has decided upon the alteration of the Old Infirmary and Infectious Hospital of the Workhouse, and the expenditure thereon of a sum not to exceed £2,800.

The new coat of paint which Buckingham Palace will be given this year will cost over £2,000. The last time the facade was painted was in 1882, and it then required two tons of white lead to perform the task. The painting has been put off from year to year owing to the expense and the succession of State functions.

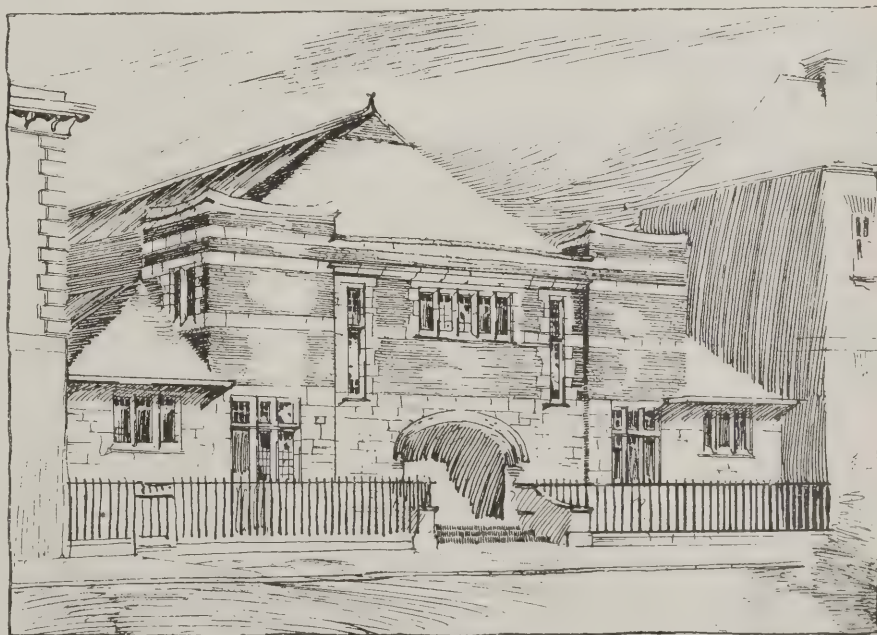
It has been erroneously assumed that London is without any Monument of Oliver Cromwell. In a prominent position in the Architectural Court of South Kensington Museum is an original model in plaster of a Colossal Statue of the Lord Protector, by John Bell.

It is proposed to spend £3,000 upon the purchase and alteration of premises for use as Local Government Offices by the Stroud Urban Council. The new premises are at the corner of George Street and Bedford Street, one portion being now in use as a shop and another (years ago the site of the General Hospital) as solicitors' offices.

The Secretary for War has approved the plan of the proposed Bridge across the Hudson River between New York and Jersey City. It is estimated that it will cost 25,000,000 dols., and require ten years for its construction. The Bridge, which will be suspended from twelve cables, will span the river without support. Between the pierhead lines on either shore there will be a clear opening of 3,110 feet, and the Bridge at the centre will be 150 feet above high water mark. The Bridge will carry six railway tracks. The Main Towers will rise to a height of 587 feet.

The forthcoming erection of a School for boys in St. Paul's Parish, Truro, is warmly welcomed by those desirous of staying off the threatened School Board. For a long time the Education Department has been dissatisfied with the School accommodation, and gave notice recently that if the deficiency were not met, steps would be taken to form a School Board. The proposed new School will provide for at least 200—50 more than the deficiency notified by the Department. The site is near the Church and the Diocesan Training College. £1,400 was the original estimate of cost, but owing to the unevenness of the site this will be increased.

IMPORTANT discoveries have been made at Nancy, which will carry the history of the place back several centuries. Two streets, dating from the sixth century, have been traced, and the excavations have already laid bare seventy tombs of warriors, women, and children. At the feet of each is a vase of coarse earthenware. Jewels of silver and gold, enamelled glass, fibulae, scissors, and hair tweezers have been found, as well as Gaulish money and one gold coin of Justinian.



Perspective Sketch

A NEW Wesleyan Methodist Chapel is to be built at Totley Rise, in the Sheffield Brunswick Circuit, at a cost of £1,575, the land being given by Mr. Ebenezer Hall.

The re-opening of the Lady Chapel of Lichfield Cathedral is fixed for Wednesday, July 31st, when Bishop Legge will dedicate seven stained-glass windows and a number of other gifts to the Cathedral.

For building an Art Gallery for the town of Reading and extending the Free Library and Museum Buildings, the Town Council has decided to vote a sum of £8,000.

The leaders of the Gidlow Congregational Mission, Wigan, have determined to erect a new School-Chapel on a site secured in Gidlow Lane. The estimated cost, including the site, is £1,400.

SOCIETY MEETINGS.

The Incorporated Association of Municipal and County Engineers.—The annual meeting of the Incorporated Association of Municipal and County Engineers will be held at Halifax on Thursday, Friday, and Saturday, 27th, 28th and 29th inst. President, Mr. Edward Rice Sweet Escott, M.I.C.E., Borough Engineer, Halifax.

Northern Architectural Association.—The members of this Association held an outdoor meeting on the 15th inst. for the purpose of visiting the new Tennis-Court erected by Captain Sir Andrew Noble within the grounds of Jesmond Dene House, from the designs of Mr. F. W. Rich, Architect, who conducted the party over the building. Tennis-Courts of this description are not at all common, only 33 being known to exist in the United Kingdom. Among the oldest of these is that at Hampton Court, another being at Lord Salisbury's seat at Hatfield. Sir Andrew Noble's Tennis-Court has been built by Messrs. Leslie and Co., of London, who have also constructed other modern Courts. Sussex bricks have been used throughout the building, which covers an area of about 800 square yards, including the Bath and Dressing Rooms and Master's Residence. Subsequently the party proceeded to inspect the Reception Room at Jesmond Dene House. This Mansion, the nucleus of which was originally built in 1822, has, during the last quarter of a century, been amplified by Sir Andrew Noble—Mr. R. Norman Shaw, R.A., and Mr. F. W. Rich, acting as his Architects.

Sheffield Society of Architects and Surveyors.—The members of this Society have made quite a new and attractive departure. In addition to the valuable and instructive lectures which they have had, they, on Saturday, June 15th, commenced a series of excursions to places of historic interest in the neighbourhood. They were permitted by his Grace the Duke of Devonshire to go through Hardwick Hall. There were present Mr. Charles Hadfield (President), Mr. C. J. Innocent (hon. Secretary), Messrs. B. Bagshawe, E. M. Gibbs, J. Smith, T. Winder, H. W. Lockwood, T. H. Waterhouse, J.P., F. Ward, J. T. Cook, C. F. Longden, J. B. Mitchell-Withers, J. E. Benton and others. The party assembled in the Great Hall at Hardwick at 12.45, and under the guidance of Mr. Bagshawe were conducted through the house. For many years, Mr. Bagshawe has been a student of the Hall and its contents, has been allowed to examine its muniments and everything that can throw any light on its history, and his explanations, historical and descriptive, of the building and of the many objects of interest which it contains, were greatly appreciated by the members. Mr. Bagshawe pointed out various objects especially deserving attention among the pictures, the furniture, the tapestry, &c., calling notice particularly to the portrait of Lady Grace Talbot, which in his opinion, contained a representation of the ancient Gateway leading to the Castle in Sheffield; and also to the portraits which have been misdescribed as the Earl and Countess of Shrewsbury. They were evidently intended to represent the father and mother of Lady Arabella Stuart. Mr. Bagshawe also exhibited to the members the accounts kept by the Countess of Shrewsbury of the furnishing of the Hall—the cost of the various articles, even to the brass candlesticks now on the walls, and the names of the persons who supplied them—the whole written in a bold masculine hand. He pointed out that the character of this remarkable lady had been greatly misrepresented by historians, including the Rev. Joseph Hunter. Before leaving the Long Hall, with its unique collection of historic portraits, Mr. Bagshawe was, on the motion of the President, seconded by Mr. Innocent, cordially thanked for having obtained permission for the visit, and for having accompanied the members.

Suffolk Institute of Archaeology.—The annual excursion of this Institute took place on Thursday, the neighbourhood visited being the highly interesting one of Great and Little Waldingfield and Long Melford. The first halt was at Great Waldingfield Church, where the Rector read a most interesting and valuable

paper, in which he pointed out the various features of the Church, explained the nature and extent of the alterations which had been carried out at various periods, and he was careful to explain that, in later years at any rate, special care had been taken to preserve as far as possible the original style and character of what was really a fine Church. The party then drove to Little Waldingfield Church, it is a simple but a good specimen of the Perpendicular style of Architecture. The Priory is remarkable for being built over some crypts possessed with very good roofs. After this, Kentwell Hall, Long Melford, was visited, and also Melford Hall, the seat of Sir Wm. Hyde Parker.

Lincolnshire Archaeological Society.—At the meetings at Stamford, in connection with this Society, two papers were read, one by the Rev. Canon Syers, on "Barnack, its Church and Quarries," and the other by the Rev. Andrew Trollope on "The principles which should govern the Restoration of our Churches." The journey lay through Barnack, Bainton, Ufford, and Whittington, and at each place the Rev. A. Sutton read a paper descriptive of the Architectural and Archaeological features of the Church. Barnack Church has a Tower of remote antiquity; probably of Danish origin. Most of the great Churches in the neighbourhood, including Peterborough Cathedral, are built of the famous local stone known as "Barnack rag." Upon their return to Stamford, the members proceeded to inspect the Churches of the town. Special attention was devoted to the Parish Church of St. Martin's, where the great Lord Treasurer Burleigh lies under a gorgeous canopied tomb. His effigy is in full armour, with the red robes and star of the garter, and with the Treasurer's wand in his hand. William Wissing, the famous Dutch painter, whose best work is at Burghley House, lies buried under the Gallery of this Church. The remaining five Parish Churches in the town were visited in turn, and great interest centred in All Saints', which belongs to the first quarter of the thirteenth century, and therefore to the purest period of the Early English style. The Church is supposed to have suffered from the violence of the Lancastrian army. Its graceful Steeple which rises to a height of 152 feet was given by William Browne, the founder of Browne's Hospital, and an uncle of Robert Browne, who was the founder of English Congregationalism. Several other places of interest in the old-World town were also visited.

THE foundation-stones of a new Wesleyan Church, to cost £4,700 have been laid at Catford, in the Lewisham Circuit.

FUNDS are needed to re-arrange and improve the ancient and picturesque Church of St. Chad, Lichfield. For the full completion of the work £1,000 will be required.

THE Walsall Town Council has resolved that application be made to the Local Government Board for sanction to a loan of £12,000 for defraying the cost of the proposed Public Baths.

TENDERS to the amount of £8,641 10s. 8d. have been accepted for the new Union Joint Hospital at Keighley.

MISS NELSON has sold the well-known Fiars Carse Estate, near Dumfries, for £27,500. Burns resided at Ellisland close by. It was in the Dining Room of the old house, which has been incorporated with the new, that the Bacchanalian contest for the whistle took place, which the poet neighbour celebrated in song.

At a recent meeting of the Harborne Charity Trustees, held in Birmingham, Mr. Ralph Heaton, Architect and Surveyor of Corporation Street, Birmingham, was appointed Surveyor to the estates.

FOR nearly a year operations have been in progress for the restoration of St. Michael's Church, Linlithgow. The Church is one of the most important specimens of an ancient Church now existing in Scotland. The congregation is now able to worship in the Church, but the formal opening, which is to be performed by the Rev. Dr. McLeod, Moderator of the General Assembly, will not, however, take place until some improvements which are yet to be carried out have been completed.

Trade and Commerce.

A Builder's Disagreement.—Edmund Pike, builder, brought an action, at Torquay, against William Brendon, another builder, concerning damage alleged to have been done plaintiff's boundary wall by defendant's excavations. The claim was for £10. Mr. Clode for plaintiff, Mr. T. B. Eastley for defendant. On a portion of the Haldon Estate, situate between Bronshill Road and Lower Bronshill Road, Ellacombe, plaintiff built a couple of houses, and built an ordinary 4 ft 6 in. boundary wall, the foundations of which were about 15 in. deep. Defendant subsequently took a plot of ground adjoining, and in excavating undermined plaintiff's boundary wall in some places, so much so that a portion of the wall fell. Mr. E. Pike said the cost of rebuilding the wall was £8 1s., and other damages brought the total claim to £10. The wall was built in 1888, and was solidly constructed.—Mr. J. Mountstephen's opinion was that the wall fell because the ground was excavated. The wall was well built.—Questioned as to the foundations, the Judge said the depth of the foundations depended on the soil.—Mr. Mountstephen: You are quite right, your Lordship.—His Honour: You see Mr. Mountstephen confirms me. (Laughter.)—William Tucker, who built the wall, said the foundations were well laid, about 15 inches deep. He also assisted in rebuilding the wall.—J. Pike gave similar evidence.—Mr. Eastley held that all defendant was called on to do was to leave a sufficient foundation to keep the wall up, and he should prove that there was sufficient foundation and a good resistance bank of the best material. There need have been no resistance bank if the wall had been properly built. He maintained that it was owing to bad construction that the wall fell.—W. Brendon alleged that some of the mortar used in the construction of the wall was made of mud. The wall was not tied as it should have been. He estimated that the cost of rebuilding the wall was £6.—Cross-examined; The wall stood for seven years before it fell. The wind had something to do with its fall.—H. C. Goss, surveyor, agreed with Brendon's views.—Richard Yeo, builder, said he examined the wall for defendant. He did not know why the wall fell, and declined to have anything to do with the case.—E. Richards, Manor Office Architect, said there was not sufficient foundation to the wall. It would have fallen in any case.—Mr. Pike acknowledged that he (the Architect) had often complained of his work.—Mr. Pike: I don't acknowledge it.—A mason in Brendon's employ supported defendant's case.—His Honour, giving judgment, did not think the wall went down to the shale, or that its fall was caused by defendant. Verdict for defendant with costs.

Remarkable French Brewery Well.—A two-inch Driven Tube Well has just been fixed at Mr. C. Ernout's Brewery, Pont de Nieppe, near Dunkerque, the extraordinary depth of 112 ft. from surface being reached. The perforated point forming the bottom of the well was covered with a fine perforated brass strainer, as the water-bearing bed consists of fine sand. A supply of 800 gallons per hour has been obtained, which rises close to ground level, and is connected to a direct-acting steam pump. The water is used for brewing the black beer for which this Brewery is celebrated. 7 ft. of peat, 13 ft. of running sand, 49 ft. of stiff clay and 43 ft. of sand were passed through. Messrs. Alfred Williams & Co., Artesian Well Engineers, 39, Great Eastern Street, London, supplied the Well, and the work was carried out under the supervision of Monsieur Georges de Geyter, the Brewer's Consulting Engineer.

An Important Building Case Decision.

—In the Court of Appeal last week Lords Justices Lindley, Lopes, and Kay delivered judgment in *Chasty v. Ackland*, an appeal from the judgment of Mr. Justice Cave at Exeter, in February last, whereby his Lordship granted a perpetual injunction in a mandatory form restraining Mr. Ackland from permitting the continuance of a new building he had erected upon his freehold premises, No. 24, West Southenhay, Exeter, so as to interfere with the access of air to the adjoining house. His Lordship also awarded the plaintiff £10 damages in respect of obstruction

of ancient lights. Defendant did not appeal from that part of the order awarding the £10 damages, but against that part of the order in which his Lordship granted the mandatory injunction. —Lord Justice Lopes, who read the judgment of Lord Justice Lindley and himself, said judgment was given for the plaintiff, and an injunction restraining the defendant from maintaining a new building beyond a certain height on the ground that it obstructed the light to which the plaintiffs were entitled in respect of certain ancient lights, and on the ground that it obstructed the free passage of air over and above the plaintiff's premises, and, therefore, created a nuisance. So far as the loss of light was concerned, plaintiff was awarded £10 damages, and on this point there was no appeal. It was said that defendant's premises prevented the carrying off of bad smells by the interruption of the free passage of air. Every man had a natural right to enjoy the air pure and free from any noxious vapours, and any man who sent foul air into his neighbour's premises ought to be restrained; but a man could not impose upon his neighbour the obligation to keep away improper smells. He was unable to agree with the learned judge that the plaintiff had any case in connection with the claim for the nuisance. It was contended that irrespective of the nuisance, the plaintiff had a right to the free passage of air over and above his premises, and the right to have any disagreeable smell carried away by the current of air that would pass over the premises, which right it was said the defendant, by his building, had infringed. There was, however, nothing to prevent the defendant building on his own land, and such a right as the plaintiff had set up could not be supported either by the authorities or the Prescription Act, and a man was not bound to see that his neighbour had proper ventilation. In his opinion, what the defendant had done he was entitled to do, and constituted no legal wrong. In those circumstances the verdict for the £10 would stand, and the defendant would pay the costs with regard to that issue; but the defendant would be entitled to such costs as were incurred by the contention in respect of the air. —Lord Justice Kay concurred.—Lord Justice Lindley said he agreed with both the judgments,

but considering the importance of the case he would like to add that no one had a right to complain of his neighbour for building on his own land, even though it might diminish the flow of air on the land adjoining, unless there was an immemorial right to the user and an agreement binding the owners not to build. In this case there was no such agreement, and the plaintiff had failed to produce the existence of any contract binding the defendant not to build over his own land. Plaintiff's claim to relief could not be sustained, and the defendant was entitled and must succeed on his appeal. Judgment accordingly.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ABERDEEN.—Accepted for the erection of pavilion, &c., for the Town Council, Mr. John Rust, City architect, 224, Union-street, Aberdeen:—

Pringle and Slesson, masonry ...	£839 0 0
Jamieson, George, carpentry ...	485 0 0
Blaikie, John, and Son, plumbing ...	763 10 0
Stephen and Gibb, plastering ...	287 17 0
Cullie, George, slating ...	95 6 8
Donald, George, and Sons, painting and glazing ...	65 0 0
Tindal, James, bellhanging ...	11 0 0
Abernethy, Jas., and Co., iron ...	41 13 0
McKinnon, Wm., and Co., engineering ...	112 0 0
Total, £2,700 7s. 5d.	

[All of Aberdeen.]

ABERDEEN (N.B.).—Accepted for the erection of public school buildings, Craigton, Peterculter, for the School Board. Messrs. Ellis and Wilson, architects, 181a, Union-street, Aberdeen. Quantities by architects:—

Buchan, Robert, masonry.	
Garvin, Jas., and Sons, carpentry.	
Rhind, McGregor, slating.	
Stephen and Son, plastering.	
Horne, Wm., plumbing.	
Masson and Son, painting.	
Total, £3,287 2s. 3d.	

[All of Aberdeen.]

ALDEBURGH (Suffolk).—Accepted for alterations and additions to "North Lodge," Aldeburgh, for Mr. John Driver. Mr. T. E. Key, architect, 5, Bloomsbury-square, W.C., and Aldeburgh:—

Knowles, G. O., Aldeburgh ...	£1,310 0 0
-------------------------------	------------

BOURNEMOUTH.—For building residence, on the West Cliff, for Mr. E. Howard May. Messrs. Creek, Gifford, and Oakley, architects, Bournemouth:—

Entwistle and Cox ...	£3,550 0 0
Hoare, W. ...	3,465 0 0
Kitcher Bros. ...	3,440 0 0
Jones and Son ...	3,386 0 0
Davies and Lambert ...	3,370 0 0
Brown and Son ...	3,362 0 0
George and Harding ...	3,355 0 0
Chinchen, W. J. ...	3,300 0 0
M'William and Son ...	3,299 0 0
Jenkins ...	3,227 0 0
Hoare, F., and Son ...	3,162 0 0
Lucas ...	2,994 0 0

[All of Bournemouth.]

CLEETHORPES (Lincs.).—For the erection of public hall, &c., for the Public Hall Company. Mr. John R. Withers, architect, Shrewsbury:—

Nutley and Mashford ...	£4,594 14 3
Ion and Lewis ...	4,337 7 3
Lea's, James ...	3,395 0 0
Hewins and Goodhand ...	3,347 6 11
Jacksaw, G., & Sons ...	3,125 0 0
Grant, M. ...	3,092 18 2
Thompson, J. M., & Sons ...	2,937 0 0
Vickers, J. H., Nottingham* ...	2,708 0 0

* Accepted.

METAL CASEMENTS of every description.

GLASS ROOFING

Shelley & Co's & Hopes Patents

HENRY 55 LIONEL ST. BIRMINGHAM

LONDON, 13 King St. Cheap-side.

MAN-CHESTER 8 Exchange Arcade.

BRICKS 2½ or 3 inch PRESSED BRICKS Cheaper & Better than STOCKS.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER. Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH. Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE. MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C. Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

ROBT. ADAMS, 67, NEWINGTON CAUSEWAY, LONDON, S.E.

These marvellous Double and Single Action, Silent, Adjustable, and Self Compensating

SPRING HINGES

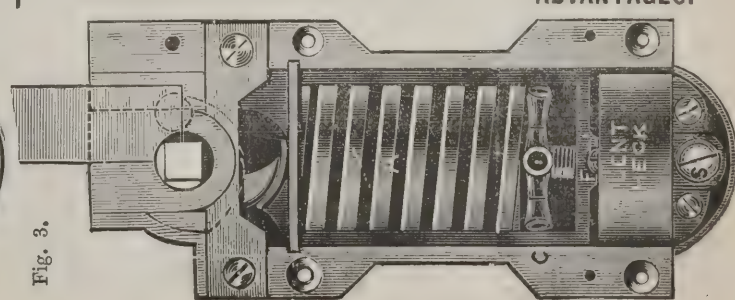
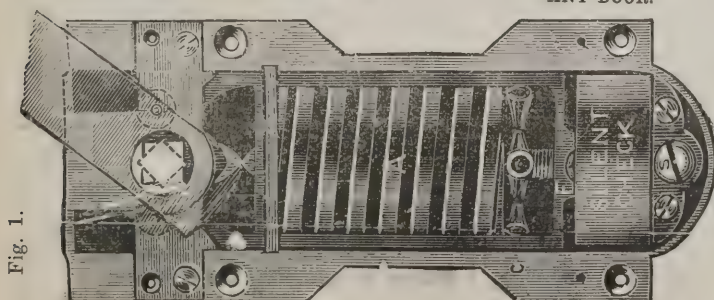
Guaranteed to last longer and work better than any hitherto made.

CAN BE FITTED TO ANY DOOR.

Fig. 1 (Silent). A Double-Action Spring Hinge which opens to and closes from the angle of 135°

Fig. 3 is the new Single Action Spring. It opens to and closes from the angle of 180°, i.e., "wide back."

THE FIRST SPRINGS EVER PRODUCED WITH THESE GREAT ADVANTAGES.



E. FARRAR & Co.,

69, BERNERS STREET, LONDON, W.,

And at MANCHESTER and GLASGOW,

MAKERS OF HIGH CLASS CASEMENTS,

Specialities—The "CLIMAX" and "ECLIPSE"
Casements (Regd.)

THE NEW PATENT

"OPENING IN AND OUT" CASEMENT,

Simplest and Cheapest in the Market and
Guaranteed Weathertight.

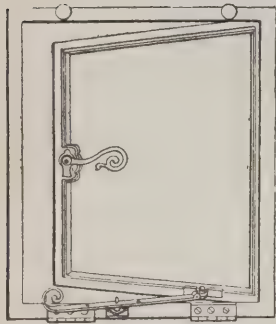


Fig. 1. Shewing Casement Opening Out

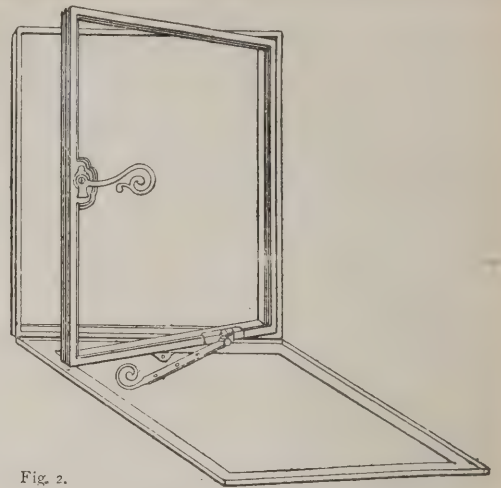


Fig. 2.

Casement Opening in with frame down for cleaning purposes.

BRISTOL.—For alterations and additions to the Oldland Common British School, for the Bitton School Board. Mr. Wm. S. Bernard, architect to the Board, 3, St. Stephen's-chambers, Baldwin-street, Bristol. Quantities by the architect:—

Baston, J.	£2,700	0	0
King, E., and Son	2,594	0	0
Gay, Enos	2,570	0	0
Woodward, E. F.	2,340	0	0
Walters, E.	2,300	0	0
Wilkins, G. H.	2,270	0	0
Clark, E.	2,230	0	0
Browning, J.	2,200	0	0
Long, C. W.	2,200	0	0
Adams and Jefferies, Oldland*	2,178	14	7
Field, W., and Son	2,170	0	0
Williams, S.	2,160	0	8

* Accepted.

BUSHEY (HERTS).—For alterations and additions to Haydon Hill, for Mr. R. Percy Attenborough. Mr. A. Ernest Taylor, architect, 12, Buckingham Street, Strand, W.C.:—

Lascelles and Co.	£6,321	0	0
Bird, Stanley J.	6,059	0	0
Holland and Hannen... ..	5,856	0	0
Smith and Co.	5,837	0	0
Downs, William (accepted)	5,722	0	0

EAST BARNET.—For alteration and additions to the "Prince of Wales" public house, East Barnet, Herts, for Messrs. Savill Bros., Ltd. Mr. Fred. A. Ashton, architect, 3, Crooked Lane, E.C.:—

Cocks, J. and H.	£395	0	0
North, C.	292	0	0
Patman, L. and W. H.	287	0	0
Hearle and Farrow (accepted)	283	0	0

EAST GRINSTEAD.—For supplying road materials, for the Urban District Council. Mr. Wm. Willis Gale, Surveyor:—

Manuelle, C. M., Lime Street, E.C. per ton o 13 6			
Flints.			
Hudson, Wm., Brighton per yd. o 7 5			
Scott, T. and D., Upper Warrington o 6 8			
Ragstone.			
Wm. Hudson, Brighton per yd. o 8 4			
Horscroft and Mills, Bowers Lane, Maidstone o 8 0			
Benstead and Sons, Maidstone o 8 0			
Gabriel, Joseph, Belvedere Road, S.E. o 7 10 3			

EGHAM.—Accepted for erecting house at Cooper's Hill, Egham, for Mr. R. J. Wood. Mr. Ernest Newton, architect. 4, Raymond's Buildings, Gray's Inn, W.C.:—

J. Bottrill and Son, Reading	£1,380	10	0
-------------------------------------	--------	----	---

[No competition.]

FRILSHAM (Berks).—Accepted for erecting three labourers' cottages at Frilsham, Berks, for Sir Cameron Gull, Bart. Mr. S. Gambier Parry, architect, Connaught Mansions, Victoria Street, S.W. Quantities by Messrs. Northcroft, Son, and Neighbour, Charing Cross:—

Bottrill, J., and Son, Reading	£695		
---------------------------------------	------	--	--

[No competition.]

HALIFAX.—Accepted for additions, &c., to St. Augustine's School. Messrs. Chas. Horsfall & Son, architects, Lord Street Chambers, Halifax:—

Jenkinson, H., Queen's Road, Halifax, masonry	£198	4	0
Mansley, J., Pellon Lane, Halifax, carpentry and joinery	136	16	4
Blackburn and Davenport, Hyde Park Road, Halifax, plastering and slating	63	0	0
Bolton, J. H., Gibbet Street, Halifax, plumbing and glazing, &c.	39	0	0
Bolton, J. H., Gibbet Street, Halifax, heating	20	0	0
Bedford and Co., Halifax, lighting and ventilating	32	17	6

HENLEY-ON-THAMES.—Accepted for additions, &c., to school buildings, for the Nettlebed School Board. Mr. S. C. Johns, architect, Wallingford:—

E. Holly, Nettlebed, Henley-on-Thames	£579	10	0
--	------	----	---

LIVERPOOL.—For the construction of new streets at Liscard, Cheshire. H. Abbey, C.E., 3, Crosshall-street, Liverpool, engineer:—

Soer, G. L. De	£963	12	2
Boughey, J.	941	6	5
Marr, L., and Son	931	6	3
Wilson, J. W. (accepted)	889	14	6

IPSDEN (OXON).—For building country house for Mr. G. C. Arding, Ipsden, Oxon. Mr. S. C. Johns, architect, Wallingford:—
Brasher and Sons, Oxon, Wallingford £911 0 0

ILFORD (Essex).—For erection and completion of nave, aisles and west porches of St. Clement's Church, Ilford. Messrs. J. E. K. and J. P. Cutts, architects, 34, Maiden-lane, Covent-garden:—

	Credit	Old	Extra for
	Materials.	Tiling of	all Roofs.
Taylor	£5,437	£10	£450
Holloway Bros... ..	5,370	5	200
Hammond	5,359	27 10	245
Watson	5,300	8	240
Porter	5,287	40	280
Dove Bros.	5,185	20	400
Perry and Co.	5,185	10	293
Brown, A.	4,900	7	225
Parmeter	4,810	5	215

LONDON.—For sundry alterations, &c., to the "Pied Horse" public-house, Chiswell-street, E.C., for Mr. Clement Stewart Mr. H. Dow-White, architect and surveyor:—

Lascelles	£1,725	0	0
Edwards and Medway	1,717	0	0
Holloway	1,698	0	0
Toms	1,692	0	0
Goodall	1,675	0	0
Spencer	1,675	0	0
Coles	1,670	0	0
Burman	1,665	0	0
Anley	1,595	0	0
Gould and Brand	1,595	0	0
Dearing	1,495	0	0

**LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.**

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,
59 & 60, CHANCERY LANE, LONDON, W.C.
N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.

**SLATE MERCHANT,
SLATER and TILER.**

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part
of ENGLAND.

**Penrhyn-Bangor,
Oakeley-Palmerston,**

And other description of Slates ready for immediate
delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

LLANDAFF.—For erecting billiard-room at Bryn Tiff, Llandaff, for Mr. David Morgan. Mr. Geo. E. Halliday, architect, 14, High Street, Cardiff. Quantities by Mr. John W. Rodger, 14, High Street:—

Allan, James	£540	0	0
Knox and Wells	527	0	0
Williams and Thomas	486	0	0
Lock, F. S.	470	0	0
Shepton and Sons	470	0	0
Turner, E., and Son (accepted)	468	0	0

[All of Cardiff.]

LEE.—For repairs, painting, &c., at "St. Deny's," Burnt Ash-hill, Lee, Kent, for Colonel Thomas Clarke. Mr. William A. Burr, architect, 65, Chancery-lane, W.C.

Larke and Sons	£228	0	0
Stevens Brothers	138	15	0
Hocking	129	10	0

LONDON.—For alterations and additions to the "Victoria Tavern" public-house, Burdett-road, Mile End, E., for Messrs. Holt and Co. Mr. Fred. A. Ashton, architect, 3, Crooked-lane, E.C.:—

Hearle and Farrow	£2,855	0	0
Watson, W.	2,658	0	0
Wall, H., and Co.	2,655	0	0
Shurmer, W.	2,639	0	0
Cocks, J. and H.	2,598	0	0
North, C.	2,203	0	0
Holland, C.	2,279	0	0

LONDON.—For rebuilding the "Britannia" public-house, High-street, Camden Town, N.W., for Mr. T. J. Wakley. Mr. Horace M. Wakley, architect. Quantities by Mr. H. Dow-White:—

Spencer	£2,952	0	0
Patman and Fotheringham	2,816	0	0
Stimpson and Co.	2,798	0	0
Lamble	2,776	0	0
Gould and Brand	2,754	0	0
Toms	2,749	0	0
Anley	2,740	0	0
Dearing	2,550	0	0

LONDON.—For pulling down and rebuilding "The Black Dog" public-house, Vauxhall-walk, S.E., for Mr. F. Linfield. Mr. John C. Jackson, architect, Town Hall Chambers, Borough. Quantities supplied:—

Williams and Son	£3,767	0	0
Falkner	3,543	0	0
Downs	3,447	0	0
Constable Bros.	3,373	0	0
Edwards and Medway (accepted)	3,159	0	0

LONDON.—For pulling down, rebuilding, and fitting up "The Earl of Derby" public house, Station Road, Forest Gate, E., for Mr. Alderman Fielder. Mr. Fred. A. Ashton, architect, 3, Crooked Lane, E.C.:—

	Building.	Fittings.	Total.
Wall, H., and Co.	£2,609	£689	£3,198
Reed, A., and Son	2,398	650	3,048
Shurmer, W.	2,352	615	2,967
Heale and Farrow	2,239	610	2,949
Watson, W.	2,360	568	2,928
Cocks, J. and H.	2,298	595	2,893
Maddison, W. J.*	2,279	583	2,783

* Accepted.

LONDON.—For rebuilding Catholic schools, Parliament-street, Bethnal-green, for the Rev. Father Gaggan. Mr. Francis Tasker, architect, 2, John-street, Bedford-row:—

Kerry	£1,300	0	0
Gough and Co.	1,084	0	0
Harper	1,060	0	0
Calman	1,053	0	0
Browning	996	0	0
Beer and Gash	961	0	0

LONDON.—For building a house in Kidderpore-avenue, Hampstead. Mr. Arthur Keen, architect, 4, Raymond-buildings, Gray's Inn:—

Bailey	£1,500	0	0
Mattock Bros... ..	1,412	0	0
Davenall, H. G.	1,375	0	0
Cooper, F. and E. (accepted)	1,374	0	0

SPHINCTER WORKS,
EMERSON STREET, LONDON, S.E.,

MANUFACTURERS OF

**LECLANCHE BATTERIES, TELEPHONES,
ELECTRICAL THERMOGRAPHS,
WATER TELEGRAPHS, and COMPLEX
COMMUNICATIONS of all kinds.**

The Builders' Journal.

Vol. I., No. 21.

Tues., July 2, 1895.

ILLUSTRATIONS.

Buller's Wood, Chislehurst : Ernest Newton, Architect 321	The Garden Front, House, Sutton Coldfield : By Ernest Newton 327
"The Destruction of Edinburgh"..... 323	Bickley Hall Stables : By Ernest Newton 328
The Mayor's Chair, Parish Church, Deal : Designed by Burke Downing 325	Buller's Wood, Chislehurst : Ernest Newton, Architect 329
Hardwicke Hall, Derbyshire, the visit of the Sheffield Society of Architects and Surveyors..... 325	The Hall of Buller's Wood, Chislehurst : By Ernest Newton 330
House, Sutton Coldfield, Entrance Front : Ernest Newton, Architect 326	The Entrance Front, Buller's Wood : By Ernest Newton 331
	A Chippendale Dog Grate : By Thomas Elsley 336

CONTENTS.

Spirit Levelling 321	The Work of Henry Moore, R.A. 329	The Fierce Struggle in Art : Mr. Whitworth Wallis advises Decorative Work..... 333
A New Field 321	The Home of the Hohenzollerns 330	Archæology in the Midlands : A Delightful Excursion 333
Board Bigotry..... 322	Sanitation in Scotland 330	A New Watering Place 333
"The Destruction of Edinburgh : " Letters from the Earl of Wemyss and Mr. John Brydon, F.R.I.B.A. 322	Wedgwood: Developments in Potteries since his Day 330	Professional Items..... 334
Bricks and Mortar 324	Honouring the Gold Medallist : Mr. James Brooks on "Capable Architects"..... 332	Society Meetings 335
Men who Build, No. 19.— Mr. Ernest Newton 328	Possibilities of Photography : Colour Sensation 332	Trade and Commerce 336

Spirit Levelling.

THE Glasgow City Fathers—by right of their Scots descent we had better call them Bailies—have had a warm discussion upon the propriety and pecuniary value of a number of Artisan Dwellings it is proposed to put up. It is always a difficult thing to prevent Artisan Dwellings from falling into the hands of the Aristocracy, we know, for the Age, we are so often told, is Levelling—Spirit Levelling! In Glasgow, however, it is the middle-class tradesman who is to be feared. He aspires to be an artisan, and has no objection to cheap houses. In fact, if one Mr. Pirrie is to be believed, "the class of people who would occupy these houses would be pretty well-to-do tradesmen, who should be provided for by private enterprise." Is Private Enterprise, we ask, so dead in Glasgow that it will not, or cannot, supply the domestic roof to the pushing tradesman? The tradesman must have his hearth and home, and Corporations may rush in where Private Enterprise and Angels fear to tread. But the Glasgow schemes do not seem to us half bad, and—on paper at any rate—they provide a reasonable profit. On one site, rating shop floorage (for the Corporation is also venturing upon shops: are these also for the "pretty well-to-do tradesmen?") at value of one shilling, one and threepence, and one and sixpence per square foot, and charging 21 houses of two apartments at £9 15s., and six houses of two apartments at £9 18s., there will be a gross rental of £453 8s. 9d. derived. The buildings will

probably cost £4,335, and the ground area is 790 square yards. Here, therefore, after the customary abatement and $3\frac{1}{2}$ per cent. interest are met, there remains a surplus profit of £188, which, we think, is a fairly smart success—for a Corporation. On a second proposed block, computed at identical floorage values, and charging three houses of three apartments at £12 10s., twelve houses of two apartments at £9 15s.,

porate enterprise. Another member of the Council wanted to know "whether they were going on a commercial basis in building property of that kind." We only know of one commercial basis—that is, profit. If the Corporate figures be strong enough for the test, the Corporation scheme is certainly commercially based, and there is really no reason why it should do more than charge reasonable interest and make a moderate surplus. Corporations do not always need to be Molochs. For what we can see in the discussion the Glasgow Corporation may get on with its levelling—and building.

WE have had sent us a New Field. by Sir James Blyth, Bart., of Blythwood, Essex, whose Model Dairy we illustrated in our first issue, a letter in which he makes an appeal for more consideration to be given to the planning and sanitary arrangements of farm dairies. In face of the fact that although of late years improvements in the utensils and machinery connected with the manufacture of butter and cheese have followed each other in quick succession, no cheap and simple



BULLER'S WOOD, CHISLEHURST: ERNEST NEWTON, ARCHITECT.

eleven houses of two apartments at £9 10s., and sixteen houses of one apartment at £5, there is shewn, roughly, a profit of £200 clear of abatement and interest. Again, in McLeod Street a block works out to £36 surplus. Mr. Pirrie's main point seemed to be that a poorer class of tenants would be evicted in order to make room for these model buildings for the hapless pretty well-to-do tradesmen. He mistrusted Cor-

form or Dairy, built upon modern principles and adapted to the requirements of the hour, is yet offered. On the other hand, catalogues containing innumerable designs of Green Houses, Orchard Houses, and Vineries, constructed cheaply on scientific principles and adapted for use are perpetually disseminated, and models are on view in nearly every Show Yard. What is required is an easily constructed building, combining

equability of temperature, perfect ventilation, good drainage, modern sanitation, every facility for expeditious and thorough working, cleanliness, durability, and cheapness in construction. Sir James Blyth's aim is to offer inducements to Architects, Builders, Implement Makers, Engineers and others, to prepare plans, designs, or models for competition. Sir James suggests that the exhibits should be shown in three groups: Group 1.—Drawings, plans or designs for large or small Butter or Cheese Dairies, and also for Creameries or Factories. Group 2.—Models of easily constructed and permanent Dairies for Butter and Cheese. Group 3.—Portable Dairies—removable by a horse to any part of the farm. If the Council of the British Dairy Farmers' Association approve of Sir James's suggestion and feel inclined to make such an Exhibition a feature of their forthcoming Dairy Show at Islington, he generously offers to place at disposal a sum of £300, so that £100 in prizes can be allotted to each group. An Exhibition of Drawings, Plans, limited-sized Models, and Portable Dairies, would do undoubtedly much good by opening up the subject of the construction of well arranged Dairies on modern and scientific principles. We understand that a Sub-Committee of the British Dairy Farmers' Association has considered the proposal, and that the scheme will be brought before the Council at its meeting to-morrow.

Board Bigotry. THERE has been another little "breeze" in Cornwall, at Liskeard, and breezes of this description are not quite as welcome as cooler airs. The Liskeard Board of Guardians would seem to have gathered together under a weight of indigestion or ignorance—or both. We are not in love with Boards of Guardians at any time; they are more portly than principled bodies, and they possess, as a rule, no soul. But Liskeard has a Board which possesses neither soul, sanitation nor spiritual interest. We are not told if Liskeard be proud. To begin with, the Building Committee had submitted plans (prepared by Mr. Samson) for an Infirmary (among other additions and alterations) at the Workhouse. It was estimated to cost £3,946. Whatever the cost, it would appear to be urgently needed. It came out in discussion that the existing Infirmary could accommodate 25 patients. The Local Government Board man happening to turn up suddenly at Liskeard Workhouse found fifty-eight patients within. Record does not say how they were found or where they were stowed. Even now, as one hot anti-sanitator admitted, there were thirty-six, although the number of "patients had declined." Declined? We think it very likely. You may cast declined into declension, Accusative: Death. However, Liskeard Board is going to fight the Local Government Board upon the matter, and we sincerely trust the Local Government Board will not decline the issue. The Liskeard Board then fell foul of the Bishop of Truro, a suggested Chapel, and an anonymous donor who wished to give something; the Board was in queer mood; it would not spend and no one else should give. The Workhouse has no Chapel, "but," said a Guardian, "the inmates had the privilege of attending any of the places of worship in Liskeard, and consequently a Chapel was not needed at the Workhouse." We are inclined to think that the unhappy inmates of Liskeard Workhouse will not be very prone to meet their friends of better fortune under the Church and Chapel roofs that shelter Members of this Board. The manner in which these stupid Boards talk of "spiritual interests," "sanitation," and "science," and the contempt in their references to "inmates" absolutely disgust right-minded men.

"THE DESTRUCTION OF EDINBURGH."

LETTERS FROM THE EARL OF WEMYSS AND MR. JOHN BRYDON, F.R.I.B.A.

WHAT RUSKIN THOUGHT OF EDINBURGH FORTY YEARS AGO.

CONSEQUENT upon a leaderette which appeared in our columns of the 18th of June, we have received two very important communications upon the matter of the construction of a huge Hotel in Princes Street, Edinburgh, by the North British Railway Company. Earl Wemyss, being a Scotch Peer, is naturally deeply concerned in this attempt to destroy the grandeur of the most picturesque City in the United Kingdom. Mr. J. M. Brydon, on the other hand, speaks purely from the Architectural view of the matter, and these two letters, backed up, oddly enough, by a lecture which Mr. Ruskin delivered in Edinburgh more than forty years ago, should go far—if anything can with Railway Directors—to induce the reconsideration of this thing.

LETTER FROM THE EARL OF WEMYSS.

To the Editor of THE BUILDERS' JOURNAL.

SIR,—I venture to appeal to you to come to the rescue, and try to save our beautiful capital city from impending destruction by this Frankenstein monster Hotel. I have no wish to discuss its Architectural merits or demerits *per se*. All I would say on this point is that though possibly well adapted for a hydropathic establishment, or colossal Hotel in the Highlands, or on the slopes of our Pentland Hills, it is unsuited by its surroundings for the intended site. Its towering Towers, gabled mansard roofed front, and its highly ornate decorated character must be admitted by all who have seen the design to be wholly out of character and keeping with its immediate Classic neighbours—the General P.O. and the Register House. It is of its stupendous, overpowering, all-crushing proportions that I would speak. To these I would apply a foot rule. It is not a question of taste that is mainly and primarily at issue, but simply one of measurement. We must get at the figures, and "facts" that will tell and "winna ding." To give a rude idea of the colossal, overshadowing character of the proposed building, I was anxious that rough boards and poles, should be erected on the top of the buildings still standing on the proposed site. In this I failed—as I learn, did also a member of the Town Council, who at one time made a similar proposal to his co-councillors. Happily there is still a way by which anyone, as he walks along Princes Street from West to East, may gauge the question for himself, given the measurements of the height of the buildings in question, and of the flagstaff standing thereon, and comparing these with the heights of the most important features of the Hotel. I append the necessary figures, and whoever will compare these measurements on the spot will, I think, be more than satisfied as to the "facts" of the case, and of the absolute necessity for delay and reconsideration of this question, so vital to our Scottish capital. I offer no further remarks thereon. I simply place this matter for consideration before the readers of your spirited Journal, if you will kindly give publicity to my letters and figures as I have placed them before the Town Council and citizens of Edinburgh—aye, and before the railway authorities themselves; for I am convinced that Lord Tweeddale and his co-directors would be the last persons to wish to destroy the beauty of Edinburgh as this Hotel, if erected, will assuredly do. I enclose some outline drawings which you may perhaps also be induced to publish, showing the size of the Hotel as compared with the surrounding buildings and the Calton Hill, &c. A sound judgment may thus be formed as to the disastrous effect the Hotel will have on our beautiful city—beautiful still—railways, Parliament, and Town Councils notwithstanding.

I am, Sir,

Yours faithfully,

St. James' Place,

June 25th, 1895.

WEMYSS.

On the receipt of Lord Wemyss's communication, we visited his Lordship in St. James'

Place and obtained the details of the objections which he—in conjunction with many Edinburgh friends—offers to the proposed buildings. He had possessed himself of photographs taken from every conceivable point in the City where the Hotel would come into view, and from these photographs he has had prepared an accurate sketch, showing Mr. Beattie's building blocked into its actual site. This drawing, which was telegraphed for from Gosford House, does not reach us in time for publication this week, so that we deem it advisable to hold over the Scale Section Cartoon, showing the relative heights of the existing buildings with that in contemplation.

LETTER FROM MR. J. M. BRYDON, F.R.I.B.A.

To the Editor of THE BUILDERS' JOURNAL.

DEAR SIR,—I am glad to see by your issue of the 18th inst., that some protest is being made against the erection of the monster Hotel in Princes Street, and sincerely hope the note of warning sounded by Lord Wemyss and Mr. William Young may not be too late. This is no question of the design of the Hotel, or of the merits of the recent competition, but of the size and scale of the building itself. If carried out as proposed, it will dwarf the whole of its surroundings and be a discordant note in an otherwise unequalled prospect. In support of this I enclose you a sketch by one of the competitors in which the realisation of his design is shown in the famous view from Edinburgh Castle. As a design it is exceedingly clever and picturesque, but that is beside the question: in bulk this Hotel will be utterly out of place. Look at the Post Office—itsself a large building—a little to the right; look at the well-known Register Office on the left; look again at the Bank of Scotland, another fine building, more to the right and nearer the spectator; and above all, look at the famous Calton Hill—the "Acropolis" of Edinburgh—in the background. The new Hotel is out of proportion with one and all—it changes the entire scale of the view, and if carried out the beautiful harmony of the scene will be "destroyed" for ever. And all for what? Princes Street is already a street of Hotels: where then can there be the demand for such a leviathan as this? It may be true that railway directors have no conscience, that on the principle of nothing being "sacred to a sapper," they think only of dividends; but surely as citizens they must be alive to the claims of one of the most beautiful cities in the World. If not, surely the people of Edinburgh will not stand quietly by and see the beauty of their fair City impaired that the North British Railway Company may make money. Why need this building be so high? Railway Hotels are not exactly the abodes people choose for a long stay; their customers are more or less birds of passage; surely then a few bedrooms less cannot seriously endanger the accommodation, and the height might be reduced by a couple of stories at least. Will you, Sir, take the matter up in conjunction with your Edinburgh contemporaries and see what can be done?—I am, &c.,

J. M. BRYDON, F.R.I.B.A.

77, Newman Street, W.

25th June, 1895.

WHAT RUSKIN THOUGHT OF EDINBURGH FORTY YEARS AGO:—

I think myself peculiarly happy in being permitted to address the citizens of Edinburgh on the subject of Architecture, for it is one which, they cannot but feel, interests them dearly. Of all the cities in the British Islands, Edinburgh is the one which presents most advantages for the display of a noble building, and which, on the other hand, sustains most injury in the erection of a commonplace or unworthy one. You are all proud of your city; surely you must feel it a duty in some sort to justify your pride, that is to say, to give yourselves a right to be proud of it. That you were born under the shadow of its two fantastic mountains; that you live where, from your room windows, you can trace the shores of its glittering Firth, are no rightful subjects of pride. You did not raise the mountains, nor shape the shores; and the historical houses of your Canongate, and the broad battlements of your Castle, reflect honour upon

you only through your ancestors. Before you boast of your city, before even you venture to call it yours, ought you not scrupulously to weigh the exact share you have had in adding to it or adorning it, to calculate seriously the influence upon its aspect which the work of your own hands has exercised? I do not say that, even when you regard your city in this scrupulous and testing spirit, you have not considerable ground for exultation. As far as I am acquainted with modern Architecture, I am aware of no streets which, in simplicity and manliness of style, or general breadth and brightness of effect, equal those of the New Town of Edinburgh. But yet I am well persuaded that, as you traverse those streets, your feelings of pleasure and pride in them are much complicated with those which are excited entirely by the surrounding scenery. As you walk up or down George Street, for instance, do you not look eagerly for every opening to the north and south, which lets in the lustre of the Firth of Forth, or the rugged outline of the Castle Rock? Take away the sea-waves, and the dark basalt, and I fear you would find little

where they form a background for other battlements, built by the hand of man. There is no necessity felt to dwell on the blue river or the burning hills. The heart and eye have enough to do in the streets of the city itself; they are contented there; nay, they sometimes turn from the natural scenery, as if too savage and solitary, to dwell with a deeper interest on the palace walls that cast their shade upon the streets, and the crowd of towers that rise out of that shadow into the depth of the sky.

That is a City to be proud of, indeed; and it is this kind of Architectural dignity which you should aim at, in what you add to Edinburgh or rebuild in it. For remember, *you must either help your scenery or destroy it*; whatever you do has an effect of one kind or the other; it is never indifferent. But, above all, remember that it is chiefly by private, not by public effort that your City must be adorned. Neither the mind nor the eye will accept a new College, or a new Hospital, or a new Institution for a City. It is the Canongate, and the Princes Street, and the High Street that are Edinburgh.

City, with and without this projected Hotel, may be shown, and we shall then consider that we have done something at least to prevent a heartless wrong to one of the most beautiful Cities in the United Kingdom.

As the result of a recent sale, the authorities of the National Gallery have become possessed—for about the sum of two thousand guineas—of a picture (ceded to them by Messrs. Agnew), which represents the Art of John Sell Cotman, at least far more adequately than does the only example of his work hitherto lodged in Trafalgar Square. Both, of course, are oil paintings; the one which since 1882 has been in the National Gallery is a river scene—possibly on the Yare—and the one which will immediately be added is an important marine subject, painted with great solidity and force, in the sanest and soundest manner of the Artist. We are glad that this canvas—the work of one of the two splendid and important masters of the Norwich School—should take its place alongside of the already more numerous representations of the Art of "Old"



"THE DESTRUCTION OF EDINBURGH."

THIS is the sketch mentioned in Mr. Brydon's letter, and was submitted by one of the competitors in the recent competition. In the left foreground we have the Picture Galleries "lying low" with the view beyond; Scott's Monument in the left-hand middle distance, and beyond it further up Princes Street, on the opposite side of the way, the Register Office. On the immediate right is the Bank of Scotland "commanding" the Railway Station in the dip, and rising above the waters of the Firth of Forth the famous Calton Hill rears its head over the City. Right in the centre of the picture—which is taken from the Castle Hill—stands the Hotel, crushing out the General Post Office, which is just seen peeping round the corner at the end of the North Bridge. Although the "Hotel" shown in the sketch is not the actual design of the successful competitor, it shows all too sufficiently the iniquity of erecting such a structure, to the utter destruction of the symmetry of the City.—ED., BUILDERS' JOURNAL.

to interest you in George Street by itself. Now I remember a city, more nobly placed even than your Edinburgh, which, instead of the valley that you have now filled by lines of railroad, has a broad and rushing river of blue water sweeping through the heart of it; which, for the dark and solitary rock that bears your Castle, has an amphitheatre of cliffs crested with cypresses and olive; which, for the two masses of Arthur's Seat and the ranges of the Pentlands, has a chain of blue mountains higher than the haughtiest peaks of your Highlands; and which, for your far away Ben Ledi and Ben More, has the great central chain of the St. Gothard Alps; and yet, as you go out of the gates, and walk in the suburban streets of that city—I mean Verona—the eye never seeks to rest on that external scenery, however gorgeous; it does not look for the gaps between the houses, as you do here; it may for a few moments follow the broken line of the great Alpine battlements; but it is only

Here we have a few plain facts, and the impression of the finest living writer on Architectural subjects. We have written to Mr. Ruskin, enclosing him all the papers and information upon the matter, but we believe his state of health and his advanced age may debar him from expressing an opinion. The Marquis of Tweeddale, the Chairman of the North British Railway Company, has expressed his happiness to meet the Editor of THE BUILDERS' JOURNAL this (Tuesday) morning upon the subject, so that next week we shall be in a position to comment upon the whole aspect of the case. In the meantime, we invite the co-operation of all friends in Edinburgh to communicate with us. We cannot find room for much correspondence, but every atom of fact which will assist in the defeat of this project will be welcome. We are glad to know that the Editor of the *Evening News* (Edinburgh) co-operates with us. We have in view a public demonstration in Edinburgh at which limelight views of the

Crome, by whom the Gallery in Trafalgar Square possesses four pictures. Yet it may still be well to remind the visitor to our National collections that the genius and individuality of Cotman, like those of David Cox, are never sufficiently displayed until opportunity has been given to obtain a knowledge of his water-colours. The water-colours of Cotman—whether the more sober productions of his earlier time, abounding in an almost unequalled breadth and force and noble reticence, or those chromatic visions which record the enchanted dreams of his later years—evince, even more than his oil paintings, alike the range of his themes and the certainty and charm with which he employed his material.

A STAINED glass window is to be erected in St. Patrick's Cathedral, in memory of the late Sir Robert Stewart, Mus.D.

A new Country Hotel has just been erected at Newcastle. Mr. J. T. Cackett was the Architect, and Mr. Thomas Weatheritt, the Contractor.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
July 2nd, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE competition for the proposed new buildings of the University Hall Settlement, has been decided in favour of Mr. Dunbar Smith. Mr. R. Norman Shaw acted as Assessor, twelve Architects having been invited to compete, including Messrs. Gerald C. Horsley, E. S. Prior, Ernest Newton, H. Wilson and E. W. Mountford, &c. The site selected for the new buildings is very central and well situated for the work of the Settlement, being at the corner of Tavistock Place and Little Coram Street, W.C. Mr. Passmore Edwards promised £4,000 towards the building fund and lately he has increased this sum to £10,000. The Committee have decided, in recognition of Mr. Edwards' gift, to call the Settlement "The Passmore Edwards Settlement." The Duke of Bedford has given £800 to the building fund and Mrs. Humphry Ward £500; the latter is the Secretary and it is largely due to her efforts that the scheme is so near realisation. It is proposed later on to erect a House of Rest in connection with the Settlement, and with this object in view additional space has been reserved in Tavistock Place; the Duke of Bedford having given the Committee the refusal of two houses up to October, 1897. The present scheme, including the land, will cost about £20,000, and of this sum rather more than £12,000 has already been promised.

MR. FREDERICK W. STEVENS, F.R.I.B.A., Companion of the Star of India, and an eminent Architect in Bombay, recently visited the studios of Messrs. Harry Hems & Sons for the purpose of inspecting the sculpture now in hand there for the new premises of the Standard Life Assurance Company, at present erecting from Mr. Stevens' designs in Dalhousie Square, Calcutta. The new edifice is the first important building ever erected entirely of brick and stone in the Empire's capital city. The work that Messrs. Hems are engaged upon is, in the main, the sculpture in stone that will adorn the main facade. The principal feature of this is a large pediment thirty feet long and seven feet high. Therein, grouped in various artistic attitudes, are seen the ten virgins, all carved in the round and each individual figure over six feet high. Another Statue, yet in the clay, represents Atlas bearing upon his shoulders the Globe. It is of colossal size, and a fine study in the nude of a herculean figure. Two other large Statues are entitled respectively "Life" and "Death." The former is shewn as a voluptuous fair-haired woman who holds a distaff in one hand and a lighted torch in the other. "Death" is of withered form enveloped in sackcloth grasping a scythe in one hand, whilst with the other she holds up a skull. Mr. Stevens, whose offices are in Green Street, Elphinstone Circle, Bombay, is now on an official visit to this country. He was the Architect for the new Municipal Buildings at Bombay. The sculpture upon these public buildings was all carved in Messrs. Harry Hems and Sons' studios. Mr. F. W. Stevens, assisted by his son, have important buildings in India, which are now being erected, and will collectively cost fully a quarter of a million of money. Amongst other foreign commissions Messrs. Hems and Sons are at

present carrying out are the choir fittings in carved oak for the new Cathedral at St. John's, Newfoundland. The new Cathedral is being built from the designs of Messrs. G. G. and J. O. Scott, Architects, of London, and sons of the late Sir Gilbert G. Scott, R.A.

At a meeting of the heritors of the parish of Auchterarder, Perthshire, sanction was obtained to the taking down of the two old bells which have done duty in the steeple of the parish Church since 1754, in order that these may be replaced by a new bell, which the congregation intend to provide by subscription. One of the bells has, indeed, summoned the parishioners to worship for a very much longer period than since 1754, and is said to be 700 years old, having tolled in the Auld or Laigh Kirk, the ruins of which still stand north of the burgh. The bells, along with some other interesting antiquarian relics—a pre-Reformation baptismal Font and the framework of an old spiral clock in the steeple—are to be retained by the heritors of Auchterarder.

AN interesting Exhibition of Wood Carving has been on view at the Carpenters' Hall, London Wall. The Company has established an Annual Art Competition in carving and woodwork for the encouragement of artistic design and workmanship. A number of prizes and medals are offered for different classes of work both to professional carvers and to students. About 170 exhibits were sent in, but no competitors have entered in several of the classes. The gold medal for any newly carved work has not been awarded this year, as the judges did not consider any exhibit of sufficient merit. The silver medal was gained by Mr. Colley for a frame carved with a design of flowers and fruit, and ornamented at the top with three cherubs in very high relief. Miss F. M. Bartholomew took the second prize for a carved jamb for a chimney-piece, and in this class, too, the first prize has not been awarded. The first prize for an enriched ogee moulding was awarded to Mr. G. W. Redmond; a bronze medal for a set of panels to Mr. J. Osmond; and a prize and certificate to Mr. W. M. Barnes for some very delicate carving in low relief, so fine that the specimens resemble plaques rather than woodwork. The students competing come from the Day and Evening Wood Carving Schools at King's College, from the ladies' branch at Kensington, and from the Carpenters' Company's School in Great Titchfield Street. Besides the wood carving, there was also on view a large number of specimens of the work done by the students at the Associated City Companies' Trade Training Schools, Great Titchfield Street, in masonry, painting, plaster work, and other trades.

THE Exhibition of Arts and Crafts at the Manchester City Art Gallery, one of the best Exhibitions ever held in the Gallery, is now closed. The attendance of visitors was large at the outset, 40,845 persons being admitted in the first week, and it increased rather than diminished towards the close, for within the 11 weeks during which the Exhibition was open, 527,577 people inspected its contents. Few out of this immense number can have gone away disappointed, for the collections were varied enough to suit all tastes, and several of them were sufficiently important to claim the attention of all engaged in the respective industries which they represent. The characteristic feature of this Arts and Crafts Exhibition, as distinguished from those previously held in London, Liverpool, and elsewhere, was the prominence given to things intended for the daily use of the many as opposed to luxuries reserved for the enjoyment of the few. The textiles, the pottery, glass, metal work, and furniture on view in the Galleries afforded welcome proof of the fact that our manufacturers are steadily improving their designs as well as their workmanship. There were scattered through the rooms many beautiful objects which the ordinary man could not hope to possess, such as Morris tapestries, modelled plaster friezes, elaborately carved furniture, Kelmscott books, and some of the choicest bookbindings that have been executed in modern times, but they were not numerous enough to make a visitor feel that he was in a museum of rarities which could necessarily have no imme-

diate influence on his daily life. As the "Arts and Crafts" movement arose out of a belief on the part of certain earnest men and women that even the simple objects of the household need not be stamped with the vulgarity and ugliness that rapidly growing manufactures seemed to bring in their train, it is important to emphasise the theory now when the movement seems for the time to be diverging from its old lines. The "Arts," if we may so express it, have been unduly favoured to the neglect of the "Crafts," whereas both should receive equal encouragement.

As we recently noted in our leader columns, the Mayor of Truro (Mr. Trevail, F.R.I.B.A.) designed the Passmore Edwards' Free Library now being erected in that city. Some two or three malcontents in the City Council, who are opposed to Mr. Trevail's crusade against insanitary conditions in Truro (the Mayor is also chairman of the County Sanitary Committee), tried to upset Mr. Trevail on legal technicalities, but the Architect-Mayor was "one too many" for these. A proposal of a county wedding gift for Mr. Passmore Edwards, Junior, whose father has done so much for Cornwall, has been warmly received.

THE restoration of the Parish Church Tower at Shoreham was not taken into consideration before it was needed. Mr. B. Ingelow, Architect, has recently inspected the Tower, and his remarks thereon are anything but satisfactory. He recommends the entire rebuilding of the north-east pier, which contains the stairs to the belfry, up to the level of the caps, and also the stair turret. That the restoration will soon have to be undertaken may be gathered from Mr. Ingelow's remarks. He says, speaking of his recommendations, "I do not think this work should be long delayed, and it would be well, before the autumn gales, to shore up and centre the two arches opening from the Aisle into the Choir and Transept. Whatever is done must be done thoroughly; mere repairs would not be of any use."

BIDEFORD'S famous old Bridge has again come into prominence by the refusal of the County Council to interdict the passage of traction engines across it. So long as traction engines are allowed to use the roads, it is perhaps illogical to prevent them going across a Bridge which is part and parcel of a main road, though this is done in many places. To avoid the Bridge at Bideford would mean a very long detour, and it is urged that if the Bridge is unsound, or, at all events, unsuited to heavy traffic, its trustees have money enough to strengthen it. There is no doubt that the present structure is inadequate to the traffic, and on wet days foot passengers have need to be wary of mud splashes, so cramped are the footways. Some of the residents have, moreover, doubts as to the stability of the structure itself. It must be admitted that traction engines, with their enormous loads, are not only a very great nuisance, but are most destructive to roads. At the last meeting of Barnstaple Highway Board it was reported that 5½ perches of road at Challacombe had been torn up by traction engines, and six culverts destroyed.

THE Irton Hall Estate, in West Cumberland, the historic seat of the Irton family, consisting of 1,935 acres of land, in the parishes of Irton and Gosforth, and comprising the mansion and demesne of Irton Hall, together with nine farms, has been purchased in private by Sir Thomas Brocklebank, Bart., Springwood, Allerton, Liverpool, and Greenlands, Cumberland, and his family, from the representatives of Messrs. S. and J. Lindow. Mr. Jonas L. Burns-Lindow, who has occupied the Hall, died recently. The Irton Hall Estate is one of the finest in West Cumberland, and adjoins Sir Thomas's estate of Greenlands. The estate comprises lowland, woodland and upland, and is beautifully wooded with ancient timber, coppice, and plantations, and is skirted on one side for three miles by the river Irt, on which there are many lovely bits of scenery. It is situated on the borders of the Lake District, and between the mountains and the sea, in one of the most beautiful parts of Cumberland, and commands charming views of the valleys of Gosforth and Irton, of the dales of the Esk and Miter, and of Irton Pike, Muncaster Fells, Wasdale Screes,

and Scawfell. The Hall has been almost entirely rebuilt since 1872, at a cost of £32,000. The old Norman Tower was restored at the same time.

THE provision of a Mayor's Chair and Corporation Pew in a Parish Church is a piece of work not often commissioned now-a-days.



MAYOR'S CHAIR, PARISH CHURCH, DEAL :
DESIGNED BY BURKE DOWNING.

Our illustration is from a photograph taken while in the Sculptor's Studio, and shows the Mayor's Chair recently erected in Deal Church, the Pew for Members of the Corporation extending right and left of it. The work was entrusted by the Corporation to Mr. Burke Downing, A.R.I.B.A., F.S.I., of London and Merton, Surrey. The carving was executed by Mr. N. Hitch, of Vauxhall, who, under the personal direction of the Architect, modelled every portion of it.

MEMORIAL gifts of Pulpit, Lectern, and Altar Rails, to St. Aidan's (Bishop Woodford Memorial) Church, Leeds, have been completed. The base of the Pulpit is of Bath stone. The central clustered shaft, cusped arches and ribs, are of Caen stone, the arches being enriched with spandrels and bosses of choice specimens of Numidian and Italian coloured marbles. The Pulpit is supported by seven columns of vert Campan marble, with richly moulded Bases in Breche Sanguine, one of the choicest of the marbles from the rediscovered ancient quarries of Numidia. The capitals, in pink alabaster, are carved in a variety of forms. Above the Caen stone arches is a bold moulding running round the Pulpit. This and also the top moulding is of dark green marble from Genoa. Sculptured panels represent six scenes from the life of St. Aidan, the missionary to whom two-thirds of England owed its Christianity. At the angles are columns in pink alabaster of exquisite spiral form, with carved capitals, and red marble bases. The remainder of the Pulpit is of pink alabaster, and enriched with carved panels and frieze. It is approached by a flight of 13 steps in Bath stone, supported by columns of vert Campan marble to correspond with the main structure. The hand-rail, balustrades, and newel, are of Caen stone, richly worked and moulded. The Lectern is of polished brass, and consists of a massive central shaft, standing upon a richly moulded base of novel form, and is surrounded by pedestals attached to the main shaft by buttresses, upon which stand four angels with extended wings blowing trumpets to the four quarters of the globe. The top consists of a revolving double desk, richly chased and pierced, and surmounted by a figure of St. Aidan, having at the sides brackets with angels supporting candlesticks. The Pulpit, Lectern and Altar Rails, have been designed by Mr. A. Crawford-Hick, Architect of the Church, and the orders executed by Mr. A. S. Hagyard, The

Studios, Leeds. The models, sculptured panels and carving, are by Mr. John Roddis, Sculptor, Birmingham.

UNEXAMPLED success has attended the Art Loan Exhibition of Pictures at the Guildhall, close upon 190,000 persons having already visited it. It is announced that the last day and hour of its being open will be Sunday, July 21st, at 7 p.m. As the apparent result of its public spirit and energy of action in the direction of Art, the Corporation has recently received a valuable presentation, by which its own Permanent Collection will be enriched.

An interesting ceremony took place at Notre Dame, when the Cardinal Archbishop of Paris, assisted by Monsignor Gaspari, Professor of the Catholic University of Paris, representing the Roman Congregation of Relics, and Abbé Many, of St. Sulpice, solemnly transferred the supposed remains of the True Cross, given by King René in 1476 to the Celestin Monks of Avignon, and other well-known relics of the Passion of Christ, to the richer reliquaries, by special authorisation of the Pope, and in the presence of the Cathedral Chapter the documents referring to the relics, which are of a most interesting character, were sealed up after the copies already existing were verified.

At the Hotel de Ville, Paris, the Artistic Decorations Committee recently examined the works ordered but not previously accepted. It received among others Benjamin Constant's painting for the Ball Room ceiling, "The City of Paris receiving the Nations of the World;" M. Binet's painting for the Salon of the Siege of Paris, M. Flameng's for the Salon of the Cariatides, and M. Dubuffe's for the Turrets Galleries. A number of decorations for panels above doors, corners of ceilings, embrasures, and niches, were also accepted. M. Denys Peuch, the Sculptor, presented an allegorical bas-relief for the Salon of the siege of Paris. M. Peuch is a young Sculptor of great talent. The copyright of his exquisitely beautiful bas relief in the Champs-Élysées Salon has been bought by M. Barbédienne. It represents the Vision of St. Anthony of Padua, who dreamt that as he was praying in the Cloister of the Monastery, the Virgin, seated on a cloud, was wafted to him, and confided to him the infant Jesus.

THE four hundredth anniversary of the re-foundation of St. John's Hospital, Lichfield, by Bishop Smyth in 1495 has been celebrated. The Hospital was originally founded before the middle of the 13th century. It was one of the numerous houses that the Order of St. Augustine erected just outside the gates of cities for the relief of poor and impotent persons, and especially for the relief and enter-

tainment of travellers and pilgrims. Two or more Brothers of the Order lived in the house with the Prior. In 1495, it having fallen into very great disorder, and the buildings being in bad condition, Bishop Smyth, then Bishop of Lichfield and visitor, rebuilt the Hospital; added largely to the endowment by uniting and appropriating to it the Hospital of Denhall, in Cheshire, which was chiefly intended for seafaring men, and the Chapelry of Freeford; and gave it new statutes. By those statutes, under which, with a few alterations since made, it is still governed, it was made more entirely an eleemosynary institution for the free instruction of scholars, and for the maintenance of thirteen poor men. It is now desired to improve the arrangements of the Sanctuary, and to provide a heating apparatus and a Vestry. After payment of necessary expenses of management, repairs of properties, the net income is about £600. The maintenance of the thirteen "brethren" (including matron, medical attendance, &c.) is about £310.

LINDFIELD Parish Church, which has been enriched with a beautiful carved oak decoration of the Baptistry, is becoming interesting by reason of its carved oak fittings. The carved oak Pulpit was presented in 1888, and since then a Vestry has been added, enclosed in panelled oak. Later, a canopied oak Reredos, a fine piece of workmanship, was erected. The Vicar's desire is to replace the green-painted woodwork in the Church with oak. This is a low dado which runs round the whole interior, and whatever might have been the original effect, it does not now harmonise with so much oak work. This will possibly be the next improvement of the ancient building. The Church has been described by a critic as being "much knocked about by restorers in 1848." Underneath the present whitewashed roof there is no doubt some beautiful oak panelling, which would be in admirable accord with the present aspect of the Church if the panels were brought out in their original state.

THE consecration of the Side-Chapel and the dedication of the rich iron Chancel Screen and the Sanctuary Candlesticks at St. Peter's, Eaton Square, mark the completion of a large amount of decorative work in glass, marble, alabaster and metals which has been in progress for the last five years at a cost of over £6,000. The Screen, designed by Sir Arthur Blomfield, A.R.A., is an excellent example of modern iron-work, and is the gift of Mr. S. E. Palmer. The Chapel, richly decorated, and with triptych at the east end, is a Memorial to her parents from Mrs. Parr; while the large Sanctuary Candlesticks, copies of those in St. Paul's, are the gift of Captain Powney of the Guards.



HARDWICKE HALL, DERBYSHIRE : THE VISIT OF THE SHEFFIELD SOCIETY OF
ARCHITECTS AND SURVEYORS.

A FEW days ago the Architect attached to the Sorbonne, in visiting the Chapel, found that several slabs had become loosened through lapse of time, and among them a stone covering the head of Richelieu, and a cast of the great Cardinal's face taken immediately after death. A Paris correspondent says that the Tomb has been formally sealed up in presence of the Princess of Monaco, representing the Richelieu family, the Princess's first husband being the late Duc de Richelieu. M. Hanotaux, Minister of Foreign Affairs, as a historian and as an admirer, and, it is said, disciple of the great Cardinal statesman, attended, and among other persons present were the Director of the Fine Arts Department, the Vice-Rector of the University of Paris, and the Chaplain of the Sorbonne. The remains of Richelieu were scattered in the Revolution of 1793, with the exception of the head.

THE proposal to carry along the Central London Railway through Newgate Street into Cheapside, has turned attention once more to the long talked of improvement at the corner between St. Martin's-le-Grand and St. Paul's Churchyard. This is one of the most congested and dangerous spots in London, and sooner or later a clearance of some of the house property standing out so awkwardly in the way of traffic across the southern end of St. Martin's-le-Grand will certainly have to be made. The new Electric Railway proposes to establish a Station near this point, and it would improve the line to get this property out of the way. Before the Railway is brought along there will clearly be the time to do it, and it has been reported that City people are thinking of setting about it.

JULIUS OLSSON and Louis Grier, two artists living at St. Ives, in Cornwall, are starting in the beginning of July a School of Landscape and Marine Painting. When practicable the work will be carried on in the open, and that should be almost always, seeing what is the climate of St. Ives. A spacious Studio, however—and Studios are large in St. Ives, where a big boat-building loft may be rented for next to nothing—will also be provided for the use of students.

THE Luther Monument, which was recently unveiled in the New Market at Berlin, is the work of two sculptors. It was commenced by Professor Otto, and, after his death, completed by Professor Toberentz. The head of the Reformer is the work of Toberentz. The idea of the Monument is to represent the special relation of the Saxon Reformer to Prussia. Hence Luther is represented in his 56th year, the time in which the Reformation was introduced by the Elector Joachim II. into the Mark of Brandenburg—that is to say, in the year 1539. Luther stands in a firm attitude, dressed in the long cassock, or "talar," which was subsequently adopted as the official dress of the Evangelical German Clergy. He is clasping the Bible to his breast with the left hand, and pointing to it energetically with his right hand. The Monument, after the precedent of the famous work at Worms, is adorned with a number of subsidiary figures. At the basis of the pedestal sit several scholars and divines, in eager disputation.

THROUGH the generosity of M. Edmund de Rothschild, the Louvre Museum is to have the treasure of silver cups, vases, and other articles, all finely chased and embossed, found

at Bosco Reale, near Pompeii. It is affirmed that the sum of £20,000 was paid for the antique *trouaille*, which dates from about the first century of the Christian era. The price asked had been deemed too high by the experts from French and other Museums, who had inspected the treasure. On one of the vases is depicted a dance of Death, and the names of Aristophanes, Euripides, and other Greek figures are engraved under the figures. This work is said to be unique and highly interesting, both artistically and archæologically. There is likewise a *putera* of the same pattern as that in the Hildesheim Collection at Berlin.

THE Archæological Society of Athens has decided to take in hand the repairs required to prevent the ancient Temple of the Parthenon from falling into a more dangerous and ruinous condition than it is in at present. The repairs are to be carried out on the lines suggested by the eminent German authority, Professor Durrm, who, after a careful and minute inspection of the structure, drew up a series of detailed instructions on the subject. A commission of Architects has been appointed to superintend the work of reparation. Three celebrated Archæologists—Mr. F. C. Penrose, the eminent English authority who has written a most masterly work on Athenian Architecture; the German Professor Durrm; and the French Archæologist, M. Magne—have been requested

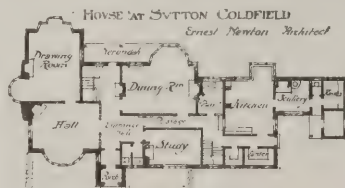
the idea that the rural labourer is dissatisfied with his lot, because life in the villages is so terribly dull and monotonous, and that he flocks into the towns, not so much for better pay, as because he desires to participate in the pleasures and the excitement to be found there. And so the true way to check the migration is to make the villages as attractive as the towns. "Every fair-sized village ought to have, on however small a scale, all the attractions of a capital—its Public Library, its Gardens, its Clubs, its handsome tree-bordered street." The village should also, we suppose, have its Theatre, its Concert Hall, its electric light, its busses, and its tramcars. Having got all these, if it were possible to get them, the village would still be without the one great attraction of town life—the crowd of bustling humanity in which the individual is absorbed and with whose current he is carried along. We are told that the plan of converting the villages into miniature cities has already been tried with success in America, and that it deserves consideration in this country. Perhaps the scheme would have more chance if it were not so very ambitious. Village life might surely be brightened without importing into the country everything which is especially characteristic of the town.

THE storm raised over the projected Statue to Cromwell has evoked some unpleasant reminiscences. People—

amongst them, Mr. Conan Doyle, the novelist—are asking why a monument in stone should be denied to the Protector who made England's enemies tremble, when there exists one to Frederick Augustus, Duke of York, Prince Bishop of Osnabruck, and Commander-in-Chief of his Majesty George III.'s forces on land? There is no denying that the Duke of York's column in St. James's is one of the most prominent decorations of London. It is of Scotch granite, it stands 124 feet high, and was designed by Wyatt and surmounted by a Statue by Westmacott. Londoners are to this day privileged on the payment of sixpence



HOUSE, SUTTON COLDFIELD, ENTRANCE FRONT: ERNEST NEWTON, ARCHITECT.



to give their views and advice on the details of the proposed repairs.

It is just 500 years since the Parish Church of Bradworthy was destroyed by fire, for it was in the year 1395 that the fabric was struck by lightning and burnt to the ground. The present has, therefore, been thought an appropriate year for starting the work of restoration. This is not the outcome of any desire to merely beautify a Church which is already in a good condition, but is a work forced upon the congregation by the unsatisfactory state of the fabric. A huge crack has been discovered at the west end, doubtless a legacy left by the lightning, which struck the Tower and destroyed one of the pinnacles a few years since, and which the pressure of the roof has tended to materially increase. Both the north and south walls have given out to the extent of some inches, while the foundations are in many places unsafe. A meeting of those interested in the work has been held. It was unanimously resolved that the work of restoration be undertaken and proceeded with as funds allow. Some of the work is an absolute necessity, such as pointing the Tower, making good the defects in the foundations, and putting the walls and roof in a satisfactory condition. A new roof is desirable, but, failing funds for that purpose, it is proposed to temporarily brace the walls.

A REMEDY for the overcrowding of cities and towns is suggested from Italy. It is based on

to survey the City from the top of the column. Yet, what did the Duke of York do to deserve the honour? History records that he displayed dismal military incapacity as Commander of an expedition to the Netherlands against the French in 1793. Worse still, history also relates that in 1811 he was forced to resign his appointment as Commander-in-Chief, owing to the scandal caused by the shameful traffic in military commissions.

THE Memorial Stone of new Sanitary Chambers for Glasgow was laid by ex-Bailie Crawford, Convener of the Health Committee. Built from plans by Mr. A. B. M'Donald, the City Architect, the Chambers will enhance the Architecture of the quarter, harmonising with the Municipal Buildings on the same line of street. They are situated at the corner of Montrose and Cochrane Streets, and are estimated to cost about £17,000. To quote from the Lord Provost's resumé of new work undertaken during the year 1893-94, "the front elevations are being treated in the style of a modified Italian Renaissance. The first storey is bold in style, with rusticated courses and round-headed windows, and forms a substantial base for the lighter and broader treatment of the second and third storeys. Above the main cornice, the sky line is broken by a rich balustrade, interrupted at intervals by peditments and finials. At the corner where

the two streets meet there will be a square Tower rising to a height from the pavement of 70 feet."

SPEAKING at the ceremony, Professor Burdick, of New York, said that before he left America on his first visit to this Motherland, he had been told by friends who had visited Scotland, simply as tourists, that he ought to spend not more than a day in Glasgow, and push on to Edinburgh and the Highlands. But he had, as a great many other Americans had, come to look upon Glasgow as the type of the very best kind of modern municipality. The problem of municipal government in the United States was one of the most serious that concerned the statesman and the student of social economy. They had not been able to solve that problem for themselves. He did not see anything in the experience thus far of American cities to lead him to hope that they could, without studying carefully the institutions of other lands, solve the question, and the eyes of their best students were being turned towards Glasgow as towards no other city of Europe, because they had learned to believe that there some of the most vexatious, most difficult, and most complicated problems, if they had not been solved, at least were on the way to solution. But, after studying Glasgow for a short time, he confessed to a feeling that they would not learn from Glasgow, after all, the secret of good municipal government. Glasgow had an advantage over them. How to be progressive and at the same time conservative was something that an American had not yet learned. How long it would take him to learn it was a matter of speculation. It seemed to him that the ancient University, and still more ancient Cathedral, in the traditions for which they stood, in the conservative influences which they wielded, were forces which could not be duplicated in America for generations. But they hoped to learn something from such wonderful experiments as it had been his pleasure to see. He did not know of anything in America comparable to that ideal place, Belvidere Hospital; he did know anything in the large cities of America comparable to the Corporation and Private Lodging Houses of Glasgow; he did not know anything which equalled the great Public Baths of Glasgow. In all these respects certainly America had before them examples which they could imitate, and he trusted they would prove themselves good imitators.

It is highly probable that the existing political crisis will interfere with the arrangements made for the opening of the new Wing of the Albert Memorial Museum, at Exeter. The Duke of Devonshire promised to perform the ceremony, and July the 19th was fixed as the date. Under existing circumstances there will, in all likelihood, have to be a postponement.

TREETON CHURCH, near Rotherham, which is mentioned in "Domesday Book," has been undergoing restoration since 1866, and upwards of £4,000 has been spent upon it. An interesting addition has just been made by the erection of a Chancel Screen of carved Austrian oak. It is the gift of Mr. F. J. Jones, of Treeton Grange, and is, as the inscription records, a memorial of the donor's wife, a former parishioner, who died in December, 1893. When the Chancel was restored in 1866 some mutilated fragments of the lower portion of the ancient Screen of fourteenth century date testified to the existence in old days of this feature so necessary for the artistic furnishing

of the sacred building, the want of which had been made more apparent since the work of repair and decoration recently executed. The new Screen is fixed in practically the same position as the old one. It is of a light and open character, and designed on the lines of the adjoining screens to the Brampton Chapel. More richness and importance is given to it by a beautifully carved cornice and cresting. The Screen has been designed by Mr. C. M. Hadfield (Sheffield), executed by Mr. F. Dealy, and the carving is the work of Mr. Frank Tory. Mr. Hadfield, the Architect, has supervised the work.

THE important eastward extension of the Transcaspian Railway system, now confirmed by Imperial rescript, will run from the present terminus at Samarcand through Djisak, Begovat, Khodshent, Kokand, and Margellan to Andishan. From Samarcand to Andishan the distance by the proposed track is a little over 516 versts. It is estimated that no fewer than 778 Bridges of all sizes will have to be constructed, but the only ones of importance will be those spanning the Siab (near Samarcand), the Saravschan, the Sapsar, and the Aksu. For the branch line to Tashkent two routes are under consideration. The cost of the new extension from Samarcand to Andishan will be at the rate of 38,933 roubles per verst.

In the course of some remarks at the Wedgwood Centenary Exhibition, Mr. Godfrey Wedgwood mentioned an interesting story con-



THE GARDEN FRONT, HOUSE, SUTTON COLDFIELD: BY ERNEST NEWTON.

cerning Mr. Gladstone's famous Collection of Wedgwood, which some years ago he was obliged to sell. Mr. Mundella rallied him on his loss, and said: "I thought that collecting was like dram drinking, a thing impossible to give up, and in which the appetite grows with what it feeds upon." Mr. Gladstone replied, "There is no cure for it, but to give it up altogether."

CONSIDERABLE progress has been made with the building of the Free Library, Abingdon, which is being erected from designs of Mr. J. G. T. West. The front elevation is in Queen Anne style, and the red brick is relieved by stone dressings and timbered gabled bay windows on the second floor, with a pair of French doors and a balcony over the central entrance. The front part of the ground floor will be occupied by two Shops with separate entrances, and there is a separate central entrance to the Library, which leads, through a corridor, to the Central Hall, in the rear of which is the news room, where stand accommodation will be provided for 40 daily and weekly newspapers. This part of the building is of one storey, with glass roof. Adjoining the central hall, on the west side, will be the Lending Library, affording space for 10,000 volumes. On the second floor, above the Shops and Central Hall, a Reference Library and Magazine Room, 38 ft. by 20 ft., and this will be divided into bays by bookcases placed at right angles to the walls. There will be a third floor above, comprising rooms for Caretaker and

Librarian. The whole building will be heated by hot water, and fitted with approved ventilation and sanitary arrangements. Towards the cost of the work the Corporation has made a grant to Christ's Hospital of £250, and in consideration of the building being let to the Library Committee rent free, the Council has also agreed to maintain the institution, the annual expenditure being estimated at £150. Mr. Grant, of Banbury, is the builder.

As a result of the Exhibition held by the Royal Scottish Geographical Society in connection with its Franklin commemoration meeting, a number of interesting and valuable objects have been presented to the Society, which is naturally considered the rightful custodian of geographical relics of public interest. Mr. John Allen Brown, F.G.S., F.R.G.S., has presented a well-executed miniature portrait of Captain Weddell, R.N., who made voyages of discovery in the Antarctic seas between 1820 and 1824, and then reached a higher southern latitude than any other previous or subsequent discoverer except Sir James Clark Ross, who surpassed him in 1842. Mr. Brown has given the original log of the *Beaufoy*, one of Weddell's vessels, also his original charts, and numerous letters and other documents relating to him. Professor Chiene has presented an extremely interesting collection of documents which belonged to the late Dr. Robert Goodsir. These include letters written after the sailing of Franklin's last expedition by his brother, Dr. Harry Goodsir, who went out as assistant-surgeon of the *Erebus*; letters written to Dr. Harry Goodsir by his father, and others written from the Arctic regions by Dr. Robert Goodsir himself, who joined two search expeditions in the hope of ascertaining the fate of his brother Harry. The Collection includes a number of letters relating to the dispatch of the Franklin expedition.

THE Finance Committee of the London County Council has presented a report upon the financial aspect of the Council's policy in building dwellings for the working classes. Some of the buildings erected, it had been found, could not earn the 3 per cent. on the outlay required by the Council, and it was recommended that the letting or selling, for the purpose of building workmen's dwellings, of lands already acquired by the Council, should be first considered before the Council decided itself to build. In the event of the Council building, it was proposed that the rents charged should not exceed those ruling in the neighbourhood, and that the building should be so designed that they should bring no charge on the rates. Further, the Home Secretary, or, if necessary, Parliament, should be asked to modify the conditions in cases where the Council was compelled by statute to re-house on particular undesirable sites, and to enable them to build on other more desirable sites.

In illustrating the work of Ernest Newton we are indebted to "Academy Architecture," for the use of the blocks of the House at Sutton Coldfield. We have pleasure in acknowledging the courtesy of Mr. Koch, the editor.

A TABLET has been placed in the Church of St. Giles's, Cripplegate, recording the fact that Oliver Cromwell was married there to the daughter of Sir James Bouchier, in 1620. The many descendants of the great Protector who have been recently discovered will be glad to know that the memory of their famous ancestor is not altogether forgotten in the City. The same Church was the burial-place of an even more illustrious Puritan—John Milton.

DEATH OF PROFESSOR HUXLEY.

AFTER a gallant struggle against a complication of insidious diseases, Professor Huxley succumbed on Saturday at his residence in Eastbourne. The World had been aware for some time of the critical condition of the Professor's health, and the announcement will not cause surprise, but the regret will be just as universal and as great at the loss to Science and to Literature of so distinguished a man, the regret being mingled with sympathy for the family by whom he was dearly beloved. Professor Huxley was stricken down with influenza as long ago as the beginning of March, and before he could shake it off, bronchitis supervened, and symptoms of lung and kidney complaints manifested themselves. These diseases, coupled with a cardiac affection of long standing, were enough to break up the strongest constitution, and it is a remarkable proof of the Professor's vitality that at the age of seventy he withstood their ravages so long. Several times he rallied in a surprising manner, and about a month ago so far regained his strength as to be able to be carried into the garden. The inevitable relapse, however, soon followed, and for a fortnight past the distinguished patient may be said to have been hovering between life and death. The exhaustion consequent upon the kidney complaint was accompanied last week by an accentuation of the heart trouble, and when Dr. Yeo visited him in company with the Professor's son and Mr. H. D. Farnell, his Eastbourne medical adviser, on Friday, he found him in an extremely weak and critical state. On Friday night and Saturday morning his condition grew worse, and all hope was abandoned, and he passed peacefully away at half-past three o'clock in the afternoon, in the presence of his wife and one of his daughters, other members of the family arriving from London just after he had drawn his last breath. Throughout his illness the Professor's mind remained perfectly clear, and he was able to read, not only books, but the daily newspapers, and to take interest in all that was passing in the World. He continued his writing up to the beginning of last week, and read up to the day before his death. He was conscious to the last, and knowledge of his coming end was borne with equanimity, his strength of character and his amiable disposition never forsaking him.

A NEW Public Library for the Parish of St. George's, Hanover Square, was opened yesterday, from designs of Mr. A. T. Bolton, on a site in Chapel Place North, South Audley Street. The elevations are of red brick and terra-cotta, in the style which has almost become the accepted one for buildings of a public or semi-public character. The design, in spite of many good qualities, lacks repose and simplicity.

THE BUILDERS' JOURNAL

AN ARCHITECT-URAL REVIEW

MEN WHO BUILD.

No. 19.

MR. ERNEST NEWTON.

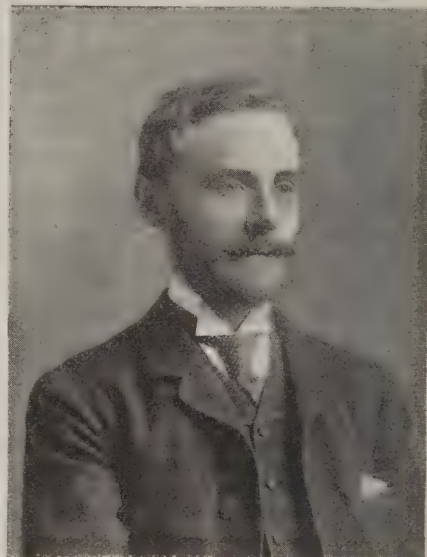


HERE was a time when Ernest Newton favoured the Architectural behests of Bloomsbury, locating himself but a few doors from "The Master," and forming one of those little nests of Artmongers who dream dreams o' nights and wake to the realisation of more sober things on the morrow. But the remove was not a great one. Raymond Buildings was the limit of his migration, perhaps it was that the rookery in the elms of Gray's Inn was too subtle in its influence for him to go farther afield; and the quiet of the old Inn, the rickety stairways, the spacious empannelled rooms, are just what an Architect—a man who deems the practice of Architecture an Art, and not merely a profession—loves, and what such a dreamer of dreams longs for. It were easy to impress oneself with the surroundings of his own beautiful home—the home he had in his mind when he penned the introduction to his "Book of Houses," which Batsford published for him five or six years back. "It has somehow become an accepted fact," was what he wrote, "that people of moderate means may not even contemplate the possession of a home of their own; the speculating builder fosters this idea, and having seized on a Suburb, proceeds to cut down the trees, uproot the hedges, and transform country into town as fast as he can. His next step is to divide the land into regular plots, and build house after house, each an exact counterpart of its neighbour, monotonous and unhomelike. Then come the tenants, all of different mould, each takes his house, gets into it somehow, and calls it home."

But one gets a clearer insight into a man's convictions when the domestic influence is not uppermost, and the stern reality of Gray's

Inn leaves the artist himself the prime figure in the picture.

Mr. Newton is still young, but old enough to have already made an indelible mark upon the Architecture of the moment, for his methods are the methods of the master under whom he served, the methods of the man who has himself done more for English domestic work than the century has otherwise accomplished. It is twenty years ago since Ernest



Newton stepped into the office of one Norman Shaw, to serve him for a period of three years "faithfully and well, his secrets keep, and all his just commands truthfully obey," and then for a further term of three years to occupy a responsible position in "the master's" drawing office, saturating himself with Architectural lore and discovering what good Architecture really is.

Mr. Newton has done a wise thing in pitching upon the "small" house as the field for his talent, and his studies in this direction have resulted in a great number of the most perfect "plans" we have yet seen. Ernest Newton is a modest man. He claims that he has done nothing big, but the drawings of Buller's Wood and the photograph of a portion of the house, shewn in this number, go far to prove the great charm of his work.

The Stables of Bickley Hall, which Mr. Raffles Davidson has sketched so charmingly, shew the broad purpose of their Architect.



BICKLEY HALL STABLES: BY ERNEST NEWTON.

The crowding of detail into every part of a building is to him a cruelty, and he is more severe even in this conviction than Mr. Norman Shaw himself. One of the few Churches he has yet done is illustrated on the walls of Burlington House. It is the Church of St. Swithin, Lewisham, and every atom of exterior detail has been devoted to the large east window, where the drawing is delicate and very fine. Otherwise, the Church is a mass of plain brick work and plain buttresses. Nothing, again, could be simpler or more perfectly planned than the house at Sutton Coldfield, also shown at the present Royal Academy; but as much can be said of everything emanating from his pencil.

An enthusiast is Ernest Newton. His "preconceived ideas" he has never wavered from. How Architects have unblushingly divorced themselves from all connection with craftsmen passes his understanding. And he laughs when he thinks of it. Is there a mason, or a joiner, or a layer of bricks

when he first entered the office of "the master." Upon the mantelpiece of his own room the "master's" portrait rests, and he lovingly takes it down, faded as it somewhat is, to shew you. A grand fellow you venture to remark: "More than that; much more" comes from Ernest Newton; "a King of men." The petty frictions of one's work worry even me at times, but for more than twenty years of privileged friendship with Norman Shaw, I never once found him aught but the most courteous, the most kind, the most considerate of men." Side by side with the Royal Academician stands a portrait of "the boys," three chubby little rascals, looking happy and contented from their morocco frame. You fancy you detect a second ambition in the eye of their Sire, as you replace the portrait, but at the moment one is sufficient. Ernest Newton has before him a splendid opportunity. Already his work is widely known and appreciated. It is the work of a pure Artist and a careful constructor. It has upon it

all or most of them were born), a while ago. The highest titular distinction was won by Henry. He became an Associate some twelve years ago and a full member of the Royal Academy in 1893. He was also a member of the Royal Society of Painters in Water Colours. The highest artistic distinction was, perhaps, his brother Albert's. Posterity will do full justice to that rare and incomparable talent, which was left absolutely unrefreshed by the Burlington fountain of honour, to the last. But Henry Moore was almost a great painter, and he had no equal in his rendering of certain effects of sea and sky. He was not in the least a showy or a tricky craftsman. He had the family taste for the more delicate and imaginative aspects of Nature. The sea of late years was his favourite subject; but it was by no means his only one. He painted landscape with great power. His marine pictures were almost wholly without incident in the common acceptance of the term. His "Coming Home" was but a great expanse of sea and sky with a few fishing boats to break the line between. The water, for the water's sake, was his delight. He wanted no more than the play



View
from The Terrace

BULLER'S WOOD, CHISLEHURST: ERNEST NEWTON, ARCHITECT.

who cannot teach us something? What do we know of metal work? We are as Architects, merely units in the Concrete Art of Building, going back to the work of the craftsmen in stone and metals for our inspirations. "Styles" in Architecture is another red rag to Ernest Newton. Where is Style? he asks, and what is it? Is it not wiser to call the character of one's work an Individualism rather than a "Style." You do not stay long in Raymond Buildings, for the convictions of Ernest Newton are an open book to you, and his methods as well known. He does not dive into Egyptology to impress you with the depth of his ideas. "I build houses," he seems to say, "and if I plan them well and build them soundly, and invest them with the sacredness of home, I am content." He knows the sacredness of home, and the happiness coming from a beautiful house, and every atom of his conviction develops from the step he took more than twenty years ago,

the influences of the man he reverences so much, and you will sadly fail in your judgment if Ernest Newton does not rise to be one of the finest domestic Architects of his time.

THE WORK OF HENRY MOORE, R.A.

MR. HENRY MOORE, R.A., the eminent painter of sea pieces, who has not been long in following his brother Albert to the grave, was an Artist by race. He was in his sixty-fourth year—at any rate he was born at York in 1831. He had long complained of failing health, but many friends tried to persuade him that he exaggerated his own symptoms; and, in trying, perhaps, succeeded in persuading themselves. A few, more discerning, were sorrowfully obliged to take him at his word. His father was a well-known portrait painter, and all the five brothers were Artists of merit. An Exhibition of the work of the whole family was opened at York (where

of the waves in their innumerable diversities of form and colour. It was the same, or much the same, when he called the picture "Outward Bound," "Hove-to for a Pilot," or "Perfect Weather for a Cruise." The name was, in no sense, indicative of incident or subject; the sea was the sole theme. When he painted a storm there was no attempt to associate its effects with human emotion, in the sense of any personal experience. The marshalling of the forces of air and water for the conflict was enough for him. He seemed to disdain the aid that other painters derive from those common objects of the artistic seashore—the fisher women with their babies waiting for the belated boat, or the lifeboat crew on their errand of peril. "The sea, the sea, the open sea," with the expanse above it, was all that he cared for. No artist has given a truer impression of the beauty and glory of space, of the majesty of the illimitable. His simplicity and sincerity, his entire freedom from all the showman's devices of the craft, all tend to make his death, in a very peculiar sense, a loss to English Art.

THE HOMES OF THE HOHENZOLLERNS.

THE two Castles of Hohenzollern and Sigmaringen are bound together by the history of the race who for centuries have held sway there, and who from Prussia's throne hold the balance of power in Europe. The Castle of Sigmaringen is the more interesting of the two, but, as the Stammschloss or Cradle of the Zollerns, Hohenzollern is of the earliest interest. The scenery reminds one of the rock palisades on the Elbe, or the peaked isolated pillars on the Meuse. Strange isolated towers and spires of rock start up by the frozen river's banks. Little towns flit past, with red roofs and Churches with deep-red Domes; and at Laufen, the Elbe is again brought to mind by the great, high, isolated, ill-looking fortress, like unto Konigstein. On the right, high up on its pure, dazzling, snowy, icy height, stand the deep brown walls of Hohenzollern. A curious and cleverly built winding roadway and tunnel leads up to the top of the rock, and the capstone of this work is engraved with the name of Carl Anton, Prince of Hohenzollern-Sigmaringen, 1852, he who gave up his power to Prussia. Arrived at the top of this twisting gangway, a terrace is reached, and, standing upon the balustrade, are two fine stone figures of men with lances, in fifteenth century armour.

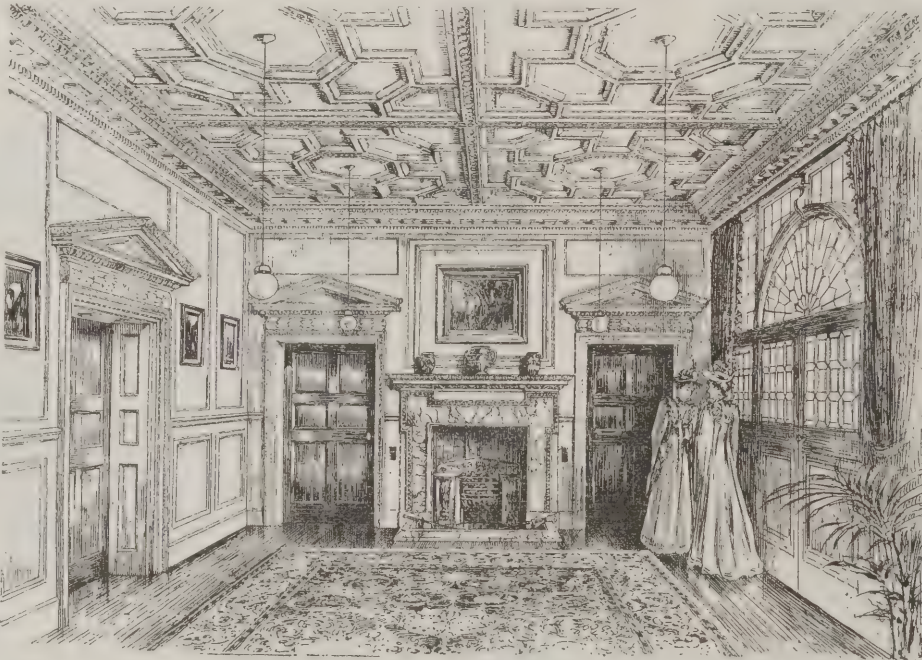
One first enters the Stammbaum or Genealogical Tree Hall. Here the walls are decorated with the usual tree, having circles on its branches with the names of the Hohenzollern and Hohenstaufen ancestors. This is illuminated with, on the left-hand side of the door, the figure of an angel who bestows a blessing on all who enter these walls to look out over the glorious Schwabenland—i.e., Swabia. The following long room is called the Library, and its walls are painted with some interesting pictures of legends of the Castle. One is of the white maid bearing provisions through the enemy to the Castle. Another depicts Frederick of Ottingen forcing his way through the besiegers in 1423. Another, in crude colours, illustrates the miraculous founding of the Church of Mariatzell, that lies just below the Castle. Angels are bearing the ready-built Church down from the skies to the valley. One picture that the villagers like to talk of shows how an impious archer shot three arrows at the Crucifix at Stettin, and fell back dead at the third shot; and yet another points out how far back the Zollerns have been connected with Portugal, for an illustration is given of the Emperor Frederick III. and Eleanora of Portugal visiting Zollern in 1466. Verses illustrating how Tradition assists History, and a chronicle of all the eventful dates of the Castle's history, are illuminated upon the pillars; and from these we glean how full of history has been this mountain stronghold since 1061. For a year (1744-5) the French held it. How terribly that holding has been repaid. The other rooms of the Castle are small, but pretty, and are fitted up as dwelling-rooms to be used when emperors or kings or princes dwell for a while, or stay a night, in this sky-lit Fortress; from whence in old days its owners swept down, and gathered unto themselves booty and power, until the whole flat land of Prussia fell beneath their rule. In 1576 a note occurs that in the Armoury were three hundred suits of mail; now there are four million armed men who move at the Hohenzollern's bidding.

SANITATION IN SCOTLAND.

AT the Conference of the Sanitary Inspectors' Association of Scotland, held in Dundee, Lord Provost Low took a retrospective view of sanitation in the middle ages, and said it must be admitted glimpses of truth on this important question began to be visible even then, for they found that in 1388 a bill was passed through Parliament against the pollution of rivers and ditches, while another was passed in 1489 against the slaughtering of cattle within burghs. It was also interesting to note as a curious historical fact that the father of William Shakespeare was fined in 1552 a sum of £2 for depositing filth in the public street, and again in 1558 for not keeping his gutter clean. Continuing, he sketched what he considered an ideal hygienic condition, remarking, in connection with the treatment of infectious diseases, that it was not only necessary to isolate those suffering from contagious disease, but also the suspects, and he would not be surprised if by-and-bye it were admitted universally that a house for suspects was as much needed as a house for those really affected.

Mr. W. W. Kelso, Sanitary Inspector, Paisley (the President for the year), speaking on the subject of "Sanitary Law and Administration," said the greatest and most powerful factor for promoting the health of the people

all persons desirous of becoming sanitary inspectors, and grant diplomas to those who pass successfully, and that a sum be set aside out of the yearly Government grant for the purpose of educating in sanitation intending inspectors. After an interval the proceedings were continued, when Councillor Elliott, sanitary convener of Dundee Town Council, read an interesting paper on the sanitary condition of Dundee seventy years ago. Mr. George Dunne, Govan, discussed the question of "The Destruction of House Refuse by Burning," describing what had been done in this way in Govan, which claimed to have been the first town in Scotland to introduce the system of disposing of offensive waste matter in a thoroughly satisfactory way. Mr. James J. Little, Paisley, dealt with the question of "Sanitary Conveniences for Country Villages." Mr. John Frew, County Inspector of Linlithgow, followed with a paper on "Hindrances to Sanitary Improvements in Counties." One great hindrance was, he said, the old ideas of many tradesmen, and their antipathy to any innovation in the way of modern appliances of workmanship. With regard to the owners of property, factors, and speculative builders, with whom the inspector had to come in contact, Mr. Frew said some of them were anxious and willing to do everything in their power to secure the comfort of their tenants and the sanitary condition of their properties, while another class was skilled in the art of how not to do anything, all the while appearing superficially to be willing and even anxious to have everything made right. He urged that sanitary laws should keep pace with Sanitary Science, and that the knowledge of Sanitary Science was much in advance of that possessed when the Public Health Act was passed in 1867. Hence the difficulty experienced in the practical application of that knowledge to the removal of certain elements which were now known to be hindrances to the advancement of public health in counties.



THE HALL OF BULLER'S WOOD, CHISLEHURST: BY ERNEST NEWTON.

should be the Public Health Act, granting that it was up to date in its provisions. As a matter of fact, however, with the powers at present possessed, the local administration of Sanitary affairs must reach the last stage of neglect before the Central Board could or would interfere. Either the Imperial Parliament or the Local Government Board should fix the standard of the qualifications required by all who wished to enter the Sanitary Service. Further local administration should be more under the control or supervision of the Central Administrative Authority, and it would therefore follow that the powers of the Local Government Board, as the Central Administrative Authority, would require to be considerably strengthened and extended. Mr. Gilbert Thomson, Lecturer on Civil Engineering and Sanitation, Glasgow and West of Scotland Technical College, read a paper on "The Technical Education of Sanitary Inspectors." He said it would be desirable to have two full courses of instruction, one dealing with the physiological and medical aspects of an inspector's work, and the other dealing with the engineering or structural side, together with a shorter course on sanitary law. On the motion of Mr. P. Fife, Glasgow, a resolution was passed declaring that the time had now arrived for the Local Government Board of Scotland to consider the question of appointing a Board of Examiners, who would examine

issued a circular. In doing this the Council has drawn up the following rules for the guidance of intending contributors: "1. It should always be the aim of the photographer to show the details of the object taken, rather than to present a pleasing picture by attempting to include effective surroundings. 2. A building should be taken from all its sides, or from as many points of view as are necessary to show the whole of it, and if it possesses any special feature, such as a doorway or window, or a fireplace in the interior, these should be taken separately. 3. On the back of each view should be written in pencil the name of the object shown, its aspects, the name of the Ecclesiastical Parish within which it stands, and the Riding. For example: Longacre Hall, Doorway in north side, Parish of Dale, West Riding. 4. The views should be of half-plate size, and should be printed by bromide, platinum, or carbon process. They should in all cases be sent unmounted. Although the Society requests compliance with the above rules as far as possible, yet photographs of other sizes, or printed by different processes, would not necessarily on that account be declined."

MR. GILBERT, R.A., has completed the Memorial of the late Mr. Frank Holl, R.A., and it has now been placed, by permission of the Dean and Chapter, in St. Paul's Cathedral.

"WEDGWOOD."

DEVELOPMENTS IN POTTERIES SINCE HIS DAY.

IN celebration of the Centenary of Josiah Wedgwood, the virtual founder of the Staffordshire Potteries, an Exhibition of old Wedgwood ware was opened on Wednesday last, at Burslem, by Mr. Mundella. The Centenary celebrated was that of Wedgwood's death. A hundred years ago he died, at the age of sixty-five, at Etruria Hall, then the most magnificent place in North Staffordshire, a beautiful house embowered in woods, and looking out upon a country which still bears traces of its former loveliness. Great mounds of refuse from Lord Granville's iron-pits and furnaces rear their mighty sides of fiery molten stuff—veritable clouds of smoke by day and pillars of fire by night—between Etruria Hall, where Josiah Wedgwood spent the last happy days of his life, and the beautiful banks of Hartshill, Bosford, and Wolstanton, still pretty, if only by contrast with their dismal surroundings. Deep marl quarries and clay pits have been cut out of the sides of these banks to obtain some of the raw

made at the Cauldon Works with such success that there is some prospect of a time when the firing of china and earthenware will no longer be a smoke-producing process; the consumption of coal will be reduced by more than one-half, and the lustre, brilliancy, and delicacy of the colours employed in decoration will be immeasurably enhanced. But while these wonderful developments—the results of a century of experiments made by keen and highly cultivated men—have been going on, the work completed by Josiah Wedgwood a hundred years ago remains, in many ways, unapproachable, and the great firm he founded remains where he left it, in the front rank of the Art Potters of the World. The Collection of old Wedgwood, which is now on view at Burslem, in connection with the Centenary celebration, is, without exception, the largest, most representative, and most beautiful that has ever been brought together. Collectors in all parts of the country have contributed handsomely of their treasures. The unique collection made by Mr. Hulme, a Burslem potter, who has made the choice of Wedgwood ware the crowning effort of a busy

Josiah Wedgwood's spirit in employing the best art for the preparation of decoration in the best materials. It was only in that spirit that Great Britain could hope to keep ahead in the competition with other countries in the markets of the World.

ASHGROVE HOME, Maybole, has been purchased for £2,000 by two ladies as a home for Glasgow City children, and handed over to the Glasgow Evangelistic Association.

At St. Saviour's Church, Dartmouth, the second section of the work of restoration has been accomplished. The last section included a new North Porch.

At a largely attended meeting of the Edinburgh and Leith Master Builders' Association, held at 20, George Street, presided over by Mr. David Heron, President of the Association, it was, after full consideration of a circular sent by the operatives to employers, unanimously agreed not to entertain the proposal for an eight hours' day. It was reported by several employers who had work in the country that their men requested, and were allowed, to work a ten hours' day.



THE ENTRANCE FRONT, BULLER'S WOOD: BY ERNEST NEWTON.

material required by the busy and thriving towns of the Potteries, Stoke and Longton, Burslem, Hanley and Tunstall, with their quarter of a million of potters and miners, a marvellous increase of population since Wedgwood's days, when the whole annual product of the district was less than £7000. Many changes and developments have taken place since Wedgwood's time. Other large firms have arisen, and other Artists have come to the front. Minton's has obtained fame. The name of Solon, whose graceful and delicate handling of the process of *pâte sur pâte* is not less characteristic than were the classic designs of Flaxman, is becoming widely famous. The Cauldon ware of late years has won a place at International Exhibitions, which has raised it to a level with the products of Minton and Copeland in the markets of the World for choice Art; while at Chicago, Doulton's Burslem work challenged a first place with the charming issues from the Cauldon kilns. Among the recent developments in the Potteries is the introduction of a famous enamelling kiln, concerning which there is at present much talk in the smoke-laden part of the country. Experiments with this German invention have been

public life, and has generously presented the result to his native town, is the nucleus of a perfect representative collection. Other amateurs in all parts of the country have contributed generously; and, of course, the National Collections at South Kensington and the Geological Museum have been freely drawn upon. Unquestionably, nothing so truly representative of Wedgwood's work, with the reproduction of the Classic Homeric and Virgilian story, in British historical studies, in grouping and portraiture, in decorative work, in articles of vertu and jewellery, has ever been collected before. A fine collection of the allied modern English Art in water-colours has been lent from South Kensington, and a beautiful representation of photographic work arranged by the Staffordshire Potteries' Society, adds a feature of attractiveness to the Exhibition. The Wedgwood Institute and Museum was opened about 30 years ago by Mr. Gladstone. The building occupies the site of the old brick house in which Josiah Wedgwood began potting. In the Lecture Hall of the Institute, at which Mr. Woodall, M.P., presided, Mr. Mundella spoke at length on Art manufacturers and the influence which had been exercised by men of

The Foundation Stone of a new Baptist Church in connection with the Church in Chapel Street, Long Eaton, was laid on Tuesday last. The site of the new building is in Clumber Street.

The Memorial Stone of the new School at Alloway (not far from Burns' Cottage) was laid recently. The School has been designed by Mr. John Murdoch, C.E., Ayr, and is already partially erected. It will be a prominent object in the well-known landscape, and it will stand detached from other buildings a short distance along the Doonholm Road, and its appearance will be worthy of its situation. The School will give greatly increased accommodation for class work, which has long been much needed at Alloway, and will add greatly to the comfort of teachers and scholars.

On Wednesday last the Hammersmith Vestry appointed Mr. Walter Herring, of Trafalgar Buildings, Charing Cross, to be the Quantity Surveyor to the new Town Hall proposed to be erected on the site of the existing Vestry Hall, Broadway, Hammersmith, from the design submitted in competition by Mr. H. Richardson. The building is estimated to cost £25,000.

HONOURING THE GOLD MEDALLIST.

MR. JAMES BROOKS ON "CAPABLE ARCHITECTS."

SPEAKING of the work of Mr. James Brooks, Mr. F. C. Penrose, in presenting to Mr. Brooks the Royal Gold Medal at the meeting of the Institute, gave a *resumé* of the eminent Church Architect's career, recapitulating many of the facts which recently appeared in the "Men Who Build" series of *THE BUILDERS' JOURNAL*, and then described the style of Architecture which Mr. Brooks had chosen for the majority of his Churches as either the Lancet, or else the Transition into Curvilinear which succeeded it. In a few instances (one of them being the Church at Hornsea) the Perpendicular style has been used very effectively. The treatment was invariably vigorous, and with a simplicity somewhat bordering on severity, particularly as concerns the exteriors. Mr. Brooks's fame, no doubt, rests mainly on his ecclesiastical designs; but they were by no means his only achievements. Among his works might be cited a large Brewery, an Hotel, many secular buildings, two Hospitals in connection with sisterhoods, extensive Stables built for the Marquis of Londonderry, labourers' Cottages, gentlemen's Mansions, one of the most remarkable of these being in South Africa. Mr. Brooks was Architect to the Diocesan Society of Canterbury, and was one of the Consulting Architects to the Incorporated Society for Building Churches.

Mr. Brooks, after thanking his brother Architects for the honour they had done him, said the Medal was annually conferred on Architects and men of letters, and was wisely not confined to Englishmen. He felt most keenly his position in having to address his fellow Architects on receiving the Medal, for he, unfortunately, was not an orator. His mind went back to those distinguished men, who in the past had filled the position he occupied that evening. He could mention name after name, but he did not wish to be invidious, although he felt as deeply as they could the honour which had been conferred upon him. An Architect was not like a Painter; the Architect's buildings stood out in their goodness or badness, and more often the latter than the former. They stood before the whole World, and made History, while the Painter's pictures went into the Picture Galleries and other places, and were more hidden from the eye. Architects, then, had a duty to perform, namely to endeavour, as far as lay in their power, to hand down their works in their humble way, as he only could hope to do, and to imitate in some slight degree those great Masters who had left behind them such monuments of their skill and ability. He referred to such men as those who had designed Durham Cathedral and Christ Church, Hampshire, both built by the same Architect. When he looked at those works, and studied those buildings, as he had studied Durham Cathedral and Christ Church, Lincoln, Ely, Salisbury, Hereford, Winchester, and other great buildings, as well as the great Collegiate Churches—which to their great regret were mostly in ruins—not to speak of the Parish Churches great and small, and then looked at his own poor efforts as an Architect, he had felt what a gulf existed between those works and his. He could attribute many of his shortcomings to the little amount of training which existed in his time. It was true that he had at a very early age a love of invention. He could give some of his efforts in that direction, and to mention one he might say that when his father first presented him a watch, he was proud and contented, but he soon got tired of looking at the outside. Wishing to see the inside, he soon found out a way to take the watch to pieces, although he found it was not an easy thing to put it together again. Not to be daunted, however, he discovered the way to do this, and from that time he regularly did the cleaning. Without the gift of invention he would ask how could a man become an Architect, as the Architect's works ought to be full of invention. Even where there was this natural gift, it could not be fruitful without systematic training and study. In his early days this great advantage did not exist. No doubt they had Professor Donaldson's lectures then, but he could not see that these gave them such insight into the com-

plete knowledge of their Art as was necessary. The Institute, however, was now offering to all young men who chose to avail themselves of it the curriculum presented for their guidance and teaching, so that they might become much more accomplished Architects than they possibly could if they had to come into their sphere of life in a sort of "tumble-up way." The Examination had now been divided into three classes: first, the Preliminary; secondly, the Intermediate; and third, the Final. He did not wish to be misunderstood on this point, for he was not going to say that the Examination was going to make men, who had not got the genius of Architects, capable Architects. He was quite aware that anyone might pass these examinations, but they would not qualify such a man to become an Architect. It was merely the means to an end; it was only the foundation and not the superstructure. If the student did not possess the natural genius requisite, no examination could impart it to him. But to those who went through this systematic training which the Institute supplied, it facilitated the acquiring of such knowledge as an Architect should possess, before he could with any success enter upon his calling. No one reaped these advantages so fully as the natural born genius, for it enabled him to obtain in a much shorter time the completion of his studies, and to make an earlier start in life on his own account than he otherwise would. By this training and the examinations, the student felt some confidence in himself, and this was a great advantage over the "tumble-up way" he had to pursue in gaining the small amount of the Art and Science of Architecture that he possessed. He was proud to receive so great an honour as the Royal Gold Medal, after the long list of medallists who had received it in former years, and of whom he was the last and the least. At all times he had endeavoured to do his duty; he had loved his Profession, and had striven hard for it. This was not the only time he had received the favour of the Institute. He had, through their very great kindness, been elected year by year to the Council, although he thought it was time for him to retire, and allow some other person to occupy his position. For four years in succession they had honoured him by electing him one of the Vice-Presidents of the Institute, and the Medal was the last honour which they had conferred upon him. He had strong feelings, because he loved the Art which he had been practising for so many years. He had been endeavouring to impress on the works that he had been carrying out for years some little originality, to show that there was some individuality in the man who had erected them.

THE City Commission of Sewers has decided to take the necessary steps to widen the entrance to Great St. Helens, Bishopsgate Street. The freehold of 120, Fenchurch Street is to be acquired at a cost of £5,082, for the purposes of improvement. The Commission has further decided to pay £100 for a piece of land thrown into the public way in Watling Street. Cheapside and the Poultry are to be re-paved by night as well as day at an extra cost of £260, and at a saving of four days out of the total twenty-one during which the street would be closed.

THE Clifton and Bedminster Executives of the Association which is endeavouring to secure the building of a Bridge between Hotwells and Bedminster, have passed the following resolution:—"That in the interests of both districts the Clift House site be approved, and that the Secretaries of both Committees be instructed to transmit a copy of the resolution to the Docks' Committee and to each of the representatives of the Bedminster and Clifton Wards." It will be seen that the resolution coincides with the view of the majority of the Bridge Sub-Committee, and with the opinion of the Docks' Engineer.

ON Thursday last, the new Primitive Methodist Chapel, which has been erected in Ford Street, Coventry, was formally opened. The new building is Gothic in style, and will accommodate about 400 worshippers; and the School in the basement will seat 250 scholars.

POSSIBILITIES OF PHOTOGRAPHY.

COLOUR SENSATION.

NEW and important possibilities for Photographic Art appear to be opened up by the discovery of Dr. Joly, of Dublin, which constituted the special attraction at the recent *soirée* of the Royal Society. It is not, apparently, a complete solution of the problem of Colour Photography, but it is certainly the most important contribution to that end that has yet been made. Hitherto, the production of natural-coloured photographs, even in the form of glass transparencies, has been a somewhat complex process, and the range of this new development of Photographic Art has been limited. It was necessary to unite by optical projection three separate images, whereas, by the process of Dr. Joly the glass plate, when held against the light, exhibits the objects in their original colours; and this result is obtained, we are told, by taking a single photographic image in the camera in the ordinary way. From an interesting paper on Dr. Joly's exhibits in the *Times*, we gather that every range of colour and texture can be dealt with by the new process. The writer describes the portrait of a gentleman seated on a garden-seat, with the flesh tints of the hands and face in their natural colours, and every detail of costume and lighting chromatically differentiated as in a hand-painted picture. Flowers are vividly rendered in all their chromatic glories. Other examples of the new process are the exterior of a red brick building in Trinity College, Dublin, fronted by a lawn, with hawthorns, and above the greenish slates a pale blue sky; the reproduction of a water-colour drawing of an Irish peasant girl, wearing a red handkerchief over a blue dress—an exact reproduction of the original, exhibited beside it; some delicately-coloured Indian and blue china, a lacquered brass microscope with burnished German-silver reflector, a thin green glass tumbler, and, finally, the visible solar spectrum. For the production of these results, it seems, it is necessary to use in combination with the ordinary sensitive plate a specially-prepared colour-plate or transparent screen, through which the rays of light pass before striking the negative. Under a strong lens or microscope the colour plate reveals a multitude of fine transparent lines of three different fundamental colours, succeeding each other over and over again in close juxtaposition, to the number of from two hundred to three hundred to the square inch. The plate exposed under this screen is developed in the usual manner, when it is found to embody in a single image all the three separate pictures, each produced by a special colour-selective action required by the older methods of composite Colour Photography. The exposure of the camera for this process is somewhat longer than that required for ordinary photographs, say from three to five seconds for a well-lit landscape; but in other respects the operation is the same. It should be understood, of course, that the negative obtained in this way shows no colour so far; but when the positive is produced, and combined with a plate ruled in three tints, chosen according to the colour-vision theory, the original image will appear as a brilliant transparency in natural colours. The choice of tints for the screens is based upon the now accepted principle that all our colour sensations are referable to the action, single or combined, of but three fundamental sensations. In other words, three fundamental colours are impartially supplied by the covering-plate, and these are automatically selected, and combined by the positive in such a manner, as to reproduce the object or image in its proper colours. The discovery obviously opens a new and important field for Photography, and must add greatly to the realistic effect of the stereoscope and kinetoscope; but the full solution of the problem of coloured photography can hardly be looked for until physicists have found some sensitive substance which will itself faithfully adopt and keep the colours of the image.

THE Kilkenny Guardians have obtained consent from the Local Government Board to the loan of £2,955 for the erection of labourers' cottages in the several divisions of the Union.

ARCHÆOLOGY IN THE MIDLANDS.

A DELIGHTFUL EXCURSION.
[From a Correspondent.]

MEMBERS of the Archæological section of the Birmingham and Midland Institute made an interesting excursion last Wednesday. They went by train to Shipton-under-Wychwood, and then drove to Burford, Oxfordshire, where the Church was visited. They were met by the Vicar (Rev. Anthony Cass), who spent more than an hour in showing the many peculiar features of the building. The piers of a Norman Tower in the centre of the Church, forming an obstacle to the clear view from many parts of the Church toward the Chancel were pointed out. The throwing into the Church of a large Early English Lady Chapel at the south-west corner about the time of Henry VII. caused this obstruction to be still more inconvenient, and bearing in mind that at that time a view of the Altar was as important as in later times has been a clear view of the Pulpit, it was thought by the late Mr. G. E. Street that an Altar and Reredos erected under the first bay of the Nave Arcade was used as a people's Altar. Seeing the admirable choice of this position, it appears highly probable that this view is correct. The curious wooden screen work was probably added at a period after the Reformation, forming what was used for many years as the Priory Pew. There is the unusual feature of a lantern of Norman date under the Tower, which, formerly hidden, has been judiciously opened to the Church. The numerous Chapels and Monuments render this Church one of the richest and most interesting in the Midlands. There is an especially fine Elizabethan Monument to Sir Lawrence Tanfield, grandfather of the Lord Falkland who was killed at Newbury. The beauty of the figures adorning this Monument suggests that it must be the work of an Italian Artist. The scene of the execution of some of the Levellers by Oliver Cromwell, one of whom has left his name cut on the lead of the Font, was passed in the churchyard, and a fine view obtained of the lofty Spire rising above the richly-wrought Porch and series of interesting windows. Leaving the Church, the party proceeded to dinner at the "Bull Inn," through a long street abounding in picturesque bits of stonework. The party then visited the Priory, a decaying House and Chapel, the seat of the Tanfields, Lord Falkland, and Lenthall, the Speaker of the Short and Long Parliaments. Here Dr. Cheatle, a descendant of the Lenthalls, acted as cicerone. The House was sold early in the present century, and now forms a beautiful ruin, surrounded by shady walks and fine trees. The picture of "The Empty Saddle," by S. E. Waller, a Basford man, depicting a portion of this House, will be familiar to many. It is remarkable that no Monument of the Lenthalls appears in the Church. Speaker Lenthall desired that he should be buried under a plain stone, with the words, "Vermis sum," but even this humble memorial was not found. From Burford a drive by the Quarries—the stone from which has built Blenheim and is now refacing the Oxford Colleges—brought the party to Shipton Court, which was visited by the kind permission of Mrs. Read, the present tenant. This Elizabethan House has been much altered internally, but its grounds and ornamental water are quaint and picturesque, as is also the history of the descent of the property. The Church of Shipton was next visited. It has a fine pyramidal broach Spire, with singular Crosses at the base. The interior has been much restored. Mr. T. Brookes, the owner of the adjoining Rectory Farm, showed the interesting features of his house and buildings, which probably formed part of a Priory or Nunnery. The "Crown Inn" has a fine mediæval roof and stone Entrance Gateway. This, in all probability, was an ancient Hall, open from the floor to the roof, but now divided into two floors and rooms. The Architecture and the charming variety of very interesting gardens and picturesque grounds rendered this one of the most successful of the Archæological excursions of the Midland Institute.

A BUST of the late President Carnot was unveiled, on Tuesday morning last, in the Place Cassini, at Nice.

THE FIERCE STRUGGLE IN ART.

MR. WHITWORTH WALLIS ADVISES DECORATIVE WORK.

SPEAKING at the opening of the Annual Loan Exhibition of Pictures, in the Walsall Free Library, Mr. Whitworth Wallis referred to the Birmingham Art Gallery and Museum, which he had the honour to direct, as a School of Archæology and of Art; a School where they were always endeavouring to bring the best influences of the Art of the past to bear upon the Art of to-day, so that the study of Beauty and its introduction into material objects, the household chattels of the present time, from jewellery to enamelled ware, pots and pans, might be fostered by the students and artisans engaged in the numerous industries connected with the great Midland metropolis. There were no limits to the progress to be made in this direction, just as there were no boundaries to the reality of the earnestness which the working man—or better still, the manufacturer—might bring to bear in beautifying the objects which it was their business to produce. Art could be more than water-colours and oil paintings, bronze or marble statues. There was just as much Art in a beautiful chalice from some old Monastery, in the wood-carving of Cathedral choir stalls, or the painted saints upon its windows, and in the thousand and one objects of every-day life if endowed with beauty of form and design. He hoped for the founding of Museums, not of fossilised and barbarous curiosities, such as the bridle worn by a Derby winner, or the handcuffs worn by Palmer the murderer, which were offered to him—but objects which should have more than a passing interest for the student and workman—a Museum to which men might bring their wives and families after their work was done (for it must be open in the evening), and by contemplation of the objects be lifted out of themselves. The study of such objects would bit by bit raise a more intelligent idea of what was good and what was bad in taste and in style, and the occasional half-hour spent in looking at such treasures should provide pleasure, not at the time but after, for the reason that being things of beauty they should be joys for ever. He warned his hearers not to regard the study of Art as a light or gentlemanly calling, by which they might easily stride up the ladder of Fame as a member of the Royal Academy. All really great Art demanded the devotion of a lifetime industry, together with earnestness, a vivid, lofty imagination, and a fine sense of noble colour—the latter a godlike gift, vouchsafed to few. He asked all who had such a conception of the ease of Art to pause before they entered upon the fierce struggle for life and fame among the already overcrowded ranks of picture-painters, and see if they could not turn their attention to design for manufacturers, to the interior decoration of houses and public buildings, and to illustrations of books, similar to the good work done in this respect by the Birmingham School. Three fields of Art to be explored and conquered were here opened to them, and it was infinitely to be preferred that they should assist in the production of beautiful and delight-giving specimens of industrial and Decorative Art, than that they should eke out a precarious existence by the painting of meretricious and effete pot-boilers. Having enlarged upon these points and impressed upon his hearers that the highest Art was closely and generally allied to extreme simplicity, and that the possession of ample means was helpless in the domain of Art without cultured taste and refinement, he said the best and greatest Art, the gentle-hearted adoration of the fifteenth and sixteenth century Italian, the stern and vigorous realism of the Dutchman, the mystic ideals of the Flemings, the golden glories of the Frenchman Claude, the ineffable beauties of Ramsey, Gainsborough, and Reynolds; the brilliant colourings of Turner; the fresh, breezy landscapes of Constable, Crome, De Wint, and dear old David Cox; and last, but not least, the triumphs of that most remarkable development of Art, or Art movement, of modern times, the works of the English pre-Raphaelites, Mr. Norman Hunt, Millais, and Ford Madox Brown—those, and the works of kindred spirits,

would endure. The study of Art was a life study; it was never finished, and never could be finished; therefore, he did not think it should be looked upon as a fascinating and a profitable way of spending one's time, but rather as a pursuit which should lift one out of the materialities of Time, and carry one forward to higher refinement and higher progress.

A NEW WATERING PLACE.

A CORRESPONDENT writes: The discovery of a new Watering Place, where the sands are, like Mr. Weller's knowledge of London, "extensive and peculiar;" where there is a 'virgin forest, luxuriant with wild flowers, as a background to the *plage*, offering shelter from the sun's rays, and affording many cool, delightful spots for *al fresco* refreshments; to be thither brought in baskets by persons about to picnic; where there is a picturesque country, through which winds a river offering excellent sport to anglers, while game and wild fowl possess their country seats on and about its banks for the greater part of the year—the discovery of a new watering place of this description comes "as a boon and a blessing to men" generally, and especially to the capitalists (meaning those who reside in the capitals) of Paris and London, from both of which centres Paris-Plage, on the coast of France, in the Pas de Calais, is equi-distant. From Paris it is to be reached by the Northern Line in four hours; from London the same. French Artists have known its attractions for a long time; but it has been left for an English Columbus to discover its capabilities, and to propose and scheme out the development of its undeniable resources. Paris-Plage will be absorbed in Mayville, and considering that it takes no more time and very little more trouble or expense to go from London to Cromer, for example, than from London to Mayville, while the advantage is offered of a complete change of air, living, language, manners, and customs, there can be no doubt that the jaded and the wearied ones will look forward to the time when Paris-Plage of the present will be the Mayville of the future, a new international seaside resort, beneficial alike to the native and to foreign visitors. The golf links should be equal to those of Sandwich. The place itself, before the great transformation scene is commenced, while yet the diligence, or 'bus, takes *messieurs les voyageurs* from Etaples (the station for Paris-Plage) to the unploughed sands of the future Mayville, is well worth a visit. Starting early from London, you can be there for lunch; spend a happy afternoon, and return by night boat from Calais, or come back as early as you like next day.

ON the subject of the protection of life and property from fire in London, the attention of the Fire Brigade Committee was called to certain of the Fire Engine Stations, which were either unsuitable for the purposes of the Brigade or in inconvenient positions. One of these was the Shoreditch Fire Engine Station in Old Street. The building, which stands on ground of which the Council owns the freehold, was erected in 1868, accommodation being provided for eight men. The number of men at present attached to the station is eleven, a number which will have to be increased. To enable more men to be lodged in the building extensive structural alterations would have had to be made to the Station. The Chief Officer, however, suggested that a larger Station be built on a site affording better means of egress. In due course plans were prepared for the new building, in connection with which an interesting ceremony took place last week.

THE Committee of the Photographic Salon will open its third annual Exhibition at the Dudley Gallery, Piccadilly, on Monday, 30th September. The Exhibition will remain open till the 2nd November. The latest dates for receiving pictures for submission to the Committee of Selection will be from the 1st to the 16th September.

THE new Pier at Mingary has recently been completed. Mr. John Adams, Glasgow, was the contractor; Mr. Wolfe Brennan, C.E., Oban, Architect. The Pier is chiefly of concrete, and faced with timber. The frontage extends to nearly 60 ft., and the depth at low water 12 ft.

Professional Items.

THE Sandon Road Wesleyan Church, Birmingham, has been further beautified by the addition of three stained-glass windows in memory of the late Mrs. C. H. Barnsley, of Osmington, Hagley Road. Two are placed on the south-east side, and one on the north-west. One of the former represents Dorcas standing in the portico of her house and presenting a garment to a poor, thinly-clad boy. In the background is an attendant with a vessel containing loaves of bread. The one adjoining depicts "Jesus in the Home at Bethany." The window on the north-west side of the Church represents "Jesus in the act of receiving and blessing little children." The windows are the work of Messrs. Swaine, Bourne & Son, King Edward's Road, Birmingham, who also executed the large window in the Chancel, with which the memorial windows perfectly harmonise. The artistic design, careful treatment, richness of colour, and excellent workmanship leave nothing to be desired, and these windows, besides supplying a fitting memorial of the deceased lady whose death was so great a loss to the Church, serve to make it one of the most beautiful of the Churches of the city.

THE newly opened Robert Candlish Hall, Seaham Harbour, is built from designs by Mr. Frank Caws, of Sunderland, and is of red brick, relieved with terra-cotta around the windows and doors. The interior comprises a large Hall on the basement, and on the right side is a room fitted as a Library, and available for games and recreation. Upstairs is a Reading Room and a Committee Room. The windows in the basement are of stained glass. In the lower part of the building, over the Main Entrance, is a portrait of the deceased Robert Candlish, entwined in a wreath of laurel leaves bearing the motto, "*Honi soit qui mal y pense*" Born 1828, died 1887." At the end of the Hall, facing the Entrance, is a white plaster medallion set in the wall, with a terra cotta setting, bearing the inscription, "Robert Candlish, born 1828, died 1887. This building is erected in memory of the late Robert Candlish by his workmen of the Seaham and Londonderry Bottle Works and their friends."

THE New Conservative Club at Seaham is to be constructed with bricks, faced with pressed bricks, and on a stone base. Although built on the flat principle it will have a most substantial appearance. The plans were designed by Mr. George Braban, of Seaham Colliery, and the structure is to be erected by the colliery masons. There will be a spacious Entrance Hall, at the far end of which there will be a bar, 10 ft. by 7 ft. The first room on the right will be devoted to billiards, and is 36 ft. by 26 ft., and will contain two tables. On the opposite side of the Hall there will be the Reading Room, 26 ft. by 24 ft., and next to it a Smoke Room, 26 ft. by 24 ft. These two apartments are to be divided by a wooden partition, which can be removed, thus forming a large room 48 ft. 9 in. in length and 26 ft. broad. There will also be a Committee Room, 25 ft. 6 in. by 12 ft. 6 in., Caretaker's Rooms and other conveniences.

MR. W. T. MARTYN MEAR, Rock, Cornwall, designed the new Church Sunday School and Percival Institute at St. Minver. Its style is Gothic freely treated, and is built of stone with Condry's buff brick dressings. The sliding screen or partition, which is of wood, having trefoiled heads to panels, permits of one of the Schoolrooms being thrown into the Institute, should more room be required for lectures, &c. The ceilings are of wood, that of the Institute being panelled. Separate entrances are provided for the Institute and Schools. The Verandah at the south-east elevation forms a Pavilion for spectators, when cricket or other games are being played in the recreation grounds. The large bay window forms a pleasing feature in the north elevation, and is an excellent lounge. The rooms are heated by the Grundy combined system of open fire and warm and ventilating grates. The building, exclusive of site, has cost £500.

THE Gymnasium and Band Room at Otley, which was opened on the 22nd ult., is built in the form of a "Model Village," for which it will be used during the summer months. The scheme has been undertaken at the cost of Mr. Henry Dacre, Solicitor, Otley and Leeds, and provides accommodation for a large Gymnasium (63 ft. by 36 ft.), Band-room (42 ft. by 24 ft.), Reading Room, Work Room, and Dressing Room, Baths, &c. The grounds attached to the building are laid out with Summer-house, Fountain, Band-stand, &c. The contracts have been carried out by T. and Wm. Maston, masons; J. Denison, joiner; Hill & Nelson, slaters; Geo. Farrand, plumber; Helliwell & Co., patent glaziers; and J. Bagshaw & Sons, iron roofs, &c. Mr. A. Marshall is the Architect.

It is proposed to erect a Memorial Drinking Fountain to the late Mr. Wentworth, at the junction of Doncaster Road and Sheffield Road, Barnsley, and the work has been entrusted to W. Oxley and Sons, Sculptors, Barnsley. The structure will be 15 feet high and three feet six inches wide at the base. The trough attached will be six and a half feet long, and will have a separate trough for dogs under it. The drinking fountain is Gothic in character, and very handsomely proportioned, and the design, which is by an Aberdeen Sculptor, is exceedingly pretty and effective.

THE Lancaster School Board has placed first the plans sent in by Mr. Robert Walker, F.R.I.B.A., Architect, Windermere and Lancaster, under the motto "Up to Date," for a large School for 1,000 children. The infants are accommodated in a separate building, with a "Mixed School" for the elder children. The large School Room, 92 ft. by 26 ft., is surrounded on three sides with eight Class Rooms and the Main Room; and the Class Rooms are divided by glazed movable partitions so that the headmaster has supervision over the whole School.

THE project for the extension of Margate eastward has been definitely quashed, having been twice thrown over by the Town Council, who have also passed resolutions directing that no further private practice of a professional kind is to be conducted by the Borough Surveyor or in his office. This latter order is very salutary, for there has always been an impression—of course a wrong one—that persons whose projects skirted very closely on infringement of the Building Bye-Laws would be wise in employing Mr. Latham as their Architect.

SATISFACTORY progress is being made with the new Board School now in course of erection at Ashford, Kent. It is on the Central Hall principle, with six Class Rooms, Central Hall, and two Cloak Rooms and Lavatories, and has been designed by Mr. Henry J. Jeffery, Architect and Surveyor, of Ashford, who is also superintending its erection. There is to be a Master's Residence in close proximity to the School. Messrs. Amos & Foad, of Whitstable, are the builders.

A NEW Chapel was dedicated by the Bishop of Norwich at Ditchingham, Norfolk, last week. It will be completed during the present autumn, and we shall report more fully on the subject later on. It has been erected by Mr. Robert Morris, Ditchingham, from designs by and under the superintendence of Mr. Augustin Frere, F.R.I.B.A., London, who also designed the whole of the Community House buildings and other works which have been erected for the Superior.

At a recent Parish Council meeting, held at Quainton, near Aylesbury, Mr. Ernest Luckett, Architect, of Aylesbury, submitted plans and sections of proposed new Water Works, which include about $1\frac{1}{2}$ miles of $2\frac{1}{2}$ in. cast-iron main. After a careful inspection of the plans the Council expressed approval of the scheme and ordered tenders to be obtained for the work. It is at Quainton that the M. S. & L. Railway joins the Metropolitan Extension from Baker Street to Aylesbury.

THE Brighouse Industrial Society recently opened a large block of new Shops and Ware-

houses in King Street, Brighouse, erected at a cost of about £6,000, from drawings by Messrs. Sharp and Waller, Architects, Brighouse. The buildings are lighted by electric light throughout, fitted with hydraulic lifts and heated by hot water on the low pressure system.

A CHAPEL and Caretaker's House for the Calvinistic Methodists, are about to be erected at Newton-on-the-Hill, one and a-half miles from Yorton Station and about seven miles from Shrewsbury. The scheme has been approved by the Montgomery and Salop Presbytery, and the new Chapel will replace an old one at Houston, situate about a mile distant. Messrs. A. B. and W. Scott-Deakin are the Architects.

BRAMLEY CHURCH as it now is possesses a good deal of historic interest, but for meeting the requirements of a growing village it is inconvenient and altogether inadequate. Restoration would not improve matters, and the cost would be as great as the project on foot for building a new Church. The total cost is estimated at over £1,000. The plans are by Mr. J. D. Webster, of Sheffield.

THE picturesquely situated "Knowle" Hotel, Sidmouth, is being greatly enlarged. New Drawing Rooms, Billiard and Smoking Rooms, Lavatories, Hall and Staircase, over a score of new Bedrooms, four or five Private Sitting Rooms, and considerable alterations to the offices, &c. Messrs. J. Begg & R. S. Balfour, of London, are the Architects.

MR. G. H. GADD, Architect to the Bromsgrove and North Bromsgrove Urban Councils, has just completed for the Board of Guardians a ground plan of the Workhouse, Infirmary, and Vagrant Wards, denoting the drainage and all internal arrangements. The plan has been much admired, and great satisfaction pronounced by the Guardians on the workmanship.

It has been unanimously decided to recommend to the Liverpool City Council at its next meeting that Mr. Harcourt E. Clare, the present Deputy Town Clerk, be appointed to the position of Town Clerk in the place of Mr. G. J. Atkinson, deceased. The salary attached to the post is £1,600 per annum.

THE tender of Mr. J. Fidler, Eckington, for £3,385, for the Restoration of Whittington Church has been accepted, with a proviso that the work be split up by the Architect, so that the contract can be stopped as soon as the sum in hand has been reached. The work is to be proceeded with at once.

A NEW Theatre is being erected in Lord Haddon Road, Ilkeston, Derby, for Mr. H. Vincent Clarke. The stage will be 35 ft., and the proscenium opening 27 ft. The auditorium will seat 1,400 persons. The plans have been prepared by Mr. U. Dymock Pratt, Architect, of Long Row, Nottingham.

THE tender of Mr. Thos. Adams, of Green Lanes, N., amounting to £4,039, has been accepted by the Shoreditch Vestry for the construction of Pipe Sewers, Manholes, Gullies, &c., in the Haggerston District of the parish of St. Leonard, Shoreditch.

MESSRS. JOHN EATON & SONS have been appointed Architects for a new School, about to be erected at Ashton-under-Lyne, for the Deaf, by the joint School Boards of Ashton, Stalybridge, and Dukinfield.

THE re-opening of Bridge Street Congregational Church, Walsall, took place on Thursday afternoon, after very extensive alterations and improvements, including the addition of an ornate new Front in terra cotta and brick. The Chapel is one of the historic Nonconformist buildings of the Midlands, its erection having taken place in 1791, when sermons were preached by the then celebrated W. Jay, of Bath, and Captain Scott, an ex-captain of the 7th Dragoons, whose appearance in the pulpit in full regimentals was at least a novelty. The extensions have been carried out by Messrs. Bailey & McConnall, Architects.

The plans of Mr. Ridler (of Homer & Ridler, of Bucklersbury, E.C.), have been chosen for the Woking Public Hall. The premium is a commission of 2 per cent. on the outlay!

For the new Waterworks, Berwick, the estimate of Messrs. M'Knight & Co., Edinburgh, at £1,135, has been accepted, subject to the approval of the engineers, Messrs. Leslie & Son, Edinburgh. There were seven estimates, and the highest was £2,120.

MESSRS. SHARP AND WALLER, Architects, Brighouse, are preparing plans for a new Infectious Diseases Hospital and Administrative Block, to be built at Clifton for the Brighouse Joint Hospital Board.

MR. A. MARSHALL MACKENZIE, A.R.S.A., Architect, Aberdeen, is at present at Mar Lodge, in connection with the Duke of Fife's intention to erect a Residence which will take the place of the Lodge recently destroyed by fire.

PLANS have been prepared for a Grammar School to be built at Motham-in-Longdendale; and also for an Infant School at Broadbottom, the adjoining parish. Messrs. John Eaton & Sons, Ashton-under-Lyne, are the Architects.

In the restoration of Flintham Church, it is proposed to remove the Choir to the Tower, which divides the Chancel from the Nave. It is intended to block the present door in the Tower and insert a window, making the Entrance to the Church by a door at the end of the Nave, on the same side as the present door in the Tower. Mr. Hodgson Fowler (Durham) has the work of restoration in hand.

The belief of antiquarians that the lane at Grassington known as Scar Street marked the site of a Roman paved way has been confirmed by the discovery of part of the pavement. Some navvies laying service pipes came upon it at a depth of between 2 ft. and 2 ft. 6 in. The Rev. Bailey J. Harker, whose researches first established the remarkable importance of Grassington (anciently Garston) as a British and Roman military centre, has seen the excavation; and some of the worn stones are to be preserved. It is hoped that the discovery will renew public interest in the labours of the Committee which, with the Duke of Devonshire as president, was lately formed for the purpose of thoroughly exploring the very extensive sites of ancient camps to be seen in and above Grass Wood (Silva Garrs).

THE annual meeting of the Archaeological Institute will be held at Scarborough, from July 16th to the 23rd inclusive, under the presidency of the Archbishop of York. The arrangements for the meeting are: Tuesday, July 16th, opening of the meeting, after which the Castle and St. Mary's Church will be visited; Wednesday, 17th, Bridlington and Burton Agnes; Thursday, 18th, Whitby; Friday, 19th, Beverley; Saturday, 20th, Old Malton and Kirkham; Monday, 22nd, Helmsley and Rievaulx; Tuesday, 23rd, Pickering and Lastingham. An extra day will be devoted on Wednesday, July 24th, to York, where the numerous Parish Churches will be visited, most of which contain fine painted glass. Professor Boyd-Dawkins will be president of the Antiquarian Section, and Sir George Sitwell, Bart., President of the Historical Section.

A VERY ominous crack at the east end of St. Mary Elms Church, Ipswich, was discovered some two years ago, and nothing was done with regard to it until within the last few months. Meanwhile the crack has been widening; the east end and the east window were threatened. The foundations have now been strengthened, further supports have been added to the east end, with the result that St. Mary-at-Elms is once more safe. St. Mary-at-Elms is supposed to be one of the most ancient Churches in the town. It is believed to be one of the Churches mentioned in Domesday Book; whether that is so or not, it is a great deal older than any register in the Church, and the register goes as far back as 1454, which is over 400 years ago.

SOCIETY MEETINGS.

Edinburgh Architectural Association.

The members of this Association, to the number of 40, went for their annual excursion on the 22nd ult. to the Island of Bute. After visiting the interesting old Chapel of St. Blane, which dates from the time of Malcolm Canmore, and which was described by Dr. Rowand Anderson, the leader for the day a visit was paid to Mount Stuart House, over which, by the kindness of the Marquis of Bute, the party were shown. The Architect was Dr. Rowand Anderson. The great Entrance Hall, worked out in marbles, was greatly admired.

Bradford Society of Architects and Surveyors.—This Society held its summer excursion on the 21st ult. at York. Among those present were Mr. Wheeler Smith (President), Messrs. H. Perkins and A. B. Burleigh (President and Secretary of the York Architectural Society), Messrs. T. H. Healey, Charles Gott, C. H. Hargreaves, W. B. Woodhead, B. D. Fairbank (hon. Secretary), John Hindle, R. Armistead, T. C. Hope, B. Cowgill, James Young, H. Marten, J. Flew, Thomas Barker, C. E. Milnes, C. H. Gott, and A. G. Adkin. The party viewed the Minster, St. Mary's Abbey, and other interesting buildings.

Lincolnshire Archaeological Society.—A number of members of this Society recently inspected Burghley House, Stamford, and other places of interest. An Archaeological find has been made in an old foundry yard in St. Peter's Street, Stamford, in the shape of a large Subterranean Chamber, containing fragments of human bones. The ancient Church of St. Mary the Benniwerk occupied a site in this immediate neighbourhood, but its exact position is not now known. A similar chamber was found on the Uppingham Road, in front of St. Leonard's Priory, Stamford, a few months ago.

Royal Society of Antiquaries of Ireland.—The third meeting for the year of the Royal Society of Antiquaries of Ireland will be held at Galway on the evening of Monday, July 8th. The excursions in connection with the meeting will extend from July 4th to July 10th. The fourth general meeting will be held on Tuesday, September 10th, at Wexford. There will be an excursion of the Society to the Loughcrew Hills on Monday, August 5th.

The British Archaeological Association is to hold its annual Congress at Stoke-upon-Trent, under the presidency of the Duke of Sutherland. The meeting will open on the 12th of August.

SAWDUST.

OWING to the closing of the Bridge over Limehouse Basin, which has been rendered necessary in consequence of the rebuilding which is now going on, persons have been compelled to make a detour of something like three miles in order to get from Poplar to Millwall, and *vice versa*. In order to minimise this inconvenience the County Council has made arrangements with the Dock Company for both pedestrians and vehicular traffic to pass through the Docks direct. As this privilege can only be exercised between six a.m. and ten p.m., great inconvenience is felt by workmen residing at either end of the Docks who have to be at work at six a.m. at the opposite end. These men have the alternative of making the detour of three miles or of losing a quarter, or even a whole day's work, by waiting until the gates open at six o'clock. An indignation meeting is to be held at Millwall.

A FORTHCOMING novelty at the Dyke Park, which is now frequently offering some special attraction for visitors, is a Pyramidal Railway, which will be 70 ft. in height, and is to be illuminated by the electric light.

THE Corporation of the city of Chichester invites tenders for the erection of a Manager's House and two Cottages on its Sewage Disposal Works near Chichester. Tenders should reach the Office of the Town Clerk by July 11th.

THE total weight of marble sent by sea from Carrara and Massa during 1894 was 72,999 tons. Out of that quantity 19,293 tons were imported to Great Britain, and 28669 tons to America.

The Builders' Journal

COMPETITIONS.

No. 4.—A Village Church.

Designs are required for a Village Church to seat 200 people. The site is a hill-side, rising one in twenty from North to South, and situate in a stone country. The cost is not to exceed £2,500. Drawings to be submitted on or before Monday the 22nd of July.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS and SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence.

Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:
Talbot House, Arundel Street,
Strand, W.C.

An improved path has been made up Vesuvius which starts from Pompeii. It is managed by the Directors of the Hotel Diomedea at Pompeii, and to a good pedestrian the labour is not excessive. The ascent is made on ponies to the base of the cone, but the cone itself is reached on foot by means of a mountain path, which our Consul describes as excellent.

THE Parks Committee recommends that £1,470 should be expended in the construction and drainage of footpaths, the formation of two ornamental ponds, shrubberies, and a rivulet, the erection of rustic Bridges and wire-fencing to the paths, and boundary fencing and gates at Brockwell Park. Although there has been considerable opposition, the recommendation was adopted by the London County Council at its last meeting.

MR. WILLIAM SPINKS, A.M.I.C.E., son of Dr. Spinks, Warrington, has been elected President of the Sanitary Engineering Section of this year's Congress of the British Institute of Public Health, to be held at Hull in August next.

SAWDUST.

THE Halifax Corporation has found it necessary to extend the Electric Light Department. When the new plant was laid down a year ago about 2,000 lamps, each of 16-candle power, had to be supplied. Now the demand has risen to 3,500, and in order to meet the anticipated increase next winter, it has been decided to double the present motive power, which is equal to 500 horse. An order has been placed with the Electric Construction Company, Limited, for a 300-unit dynamo, to be coupled direct to a 600 horse-power vertical engine of the Politt & Wiggall make.

THE public memorial to Mrs. Siddons will take the form of a Monument, representing Sir Joshua Reynolds's picture of "The Tragic Muse," to be erected on Paddington Green.

THE will of Mr. George Francis Trollope, of Sloane Gardens, S.W., and Streatham, Surrey, who died at 96, Marina, St. Leonard's-on-Sea, on March 13th, was proved on May 17th, the gross value of the personal estate amounting to £61,845.

SEASONED timber is about twice as strong as green timber, but well-seasoned timber loses its strength with the absorption of moisture. Timbers of large sections have equal strength per square inch with small ones, when they are equally free from blemish. Knots are as great a source of weakness in a column as in a beam. Long-leaved pine is stronger than the average oak; and bleeding timber does not impair its qualities.

THE Restoration of Metz Cathedral, which was suspended twenty-five years ago through the Franco-German War, is to be resumed.

BUXTON is to be furnished with a new Church for the population residing in Higher Buxton. The Duke of Devonshire will be asked to give a site for the proposed Church, the vicinity of Darwen Street being considered suitable from various points of view.

THE old and inconvenient Passenger Station at Prestatyn, is to be replaced by a more commodious and conveniently arranged one.

THE Memorial Effigy of the late Dr. Harvey Goodwin, Bishop of Carlisle, will be unveiled by the Archbishop of York, in Carlisle Cathedral on Sept. 17th.

SEVEN memorial stones in connection with a new Primitive Methodist Chapel and Sunday School at Bruntcliffe, Morley, were recently laid by the Mayor of Morley (Mr. C. Scarth), and Alderman S. Stockdale. The estimated cost of the building, inclusive of the site, is £1,250.

THE new Congregational Church, which is being erected at St. Anne's-on-the-Sea, at a cost of £8,000 (exclusive of land), is nearing completion, and is said to be a very handsome building.

A TOURNAMENT was held by the Tower Hamlets Rifle Volunteer Brigade on the 22nd ult. to celebrate the completion of the alterations and additions to its Headquarters, which have been carried out at a total cost exceeding £2,000.

THE Carnarvon School Board has had under consideration several schemes for improving the accommodation, the present buildings having been partially condemned by the Education Department. It has been decided to submit to her Majesty's Inspector for the District and the travelling Architect of the Department, a scheme involving certain alterations which are estimated to cost £2,500.

CONTRACTS for extensive engineering works are about to be allotted by the Belgian railway authorities. The cost of the works, the contract for which will be allotted on July 3rd, will exceed 2,000,000 francs; towards the middle of August a further contract, involving the expenditure of some 5,000,000 francs, will be allotted for the construction of a new Railway Station. Further details as to conditions of tender have been asked for, and, when received, can be seen at the Commercial Department of the Foreign Office, between the hours of 11 and 6.

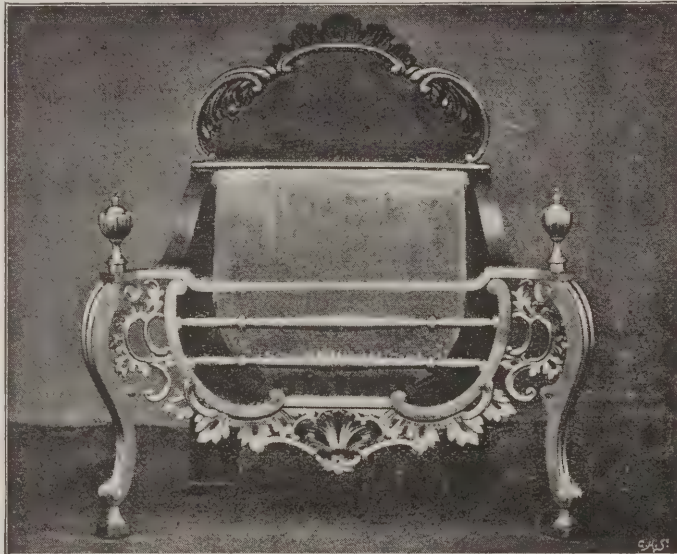
SERIOUS subsidences, imperilling the safety of three public works and several tenements, have taken place on burgh lands at Paisley. The oil works of Messrs. Highgate have been closed, and the Victoria Foundry is to be shut on Thursday. The firms, it is stated, will hold the Paisley Town Council responsible for damages caused by the subsidences, which are alleged to be due to mineral workings.

THE Paris Exhibition of 1900 is to cost more and to contain a larger area of buildings than the Chicago World's Fair. Part of the scheme for laying out the grounds consists in the destruction of the Palais de l'Industrie and the conversion of a part of it to exhibition purposes. An avenue will be built to connect the Champs Elysées with the Esplanade des Invalides.

THE Bosco-Reale treasure has been purchased and presented to the Louvre by Baron Edmund Rothschild. It consists of forty silver articles, which were tied up and concealed in a niche at the time of the destruction of Pompeii in the year 79. The Louvre had declined to give the 500,000 frs. demanded for the collection.

THE National Gallery has just acquired the grand sea-scape, by Cotman, sold at the late Price Sale. Messrs. Agnew, the purchasers, having ceded the picture to the Trustees.

A FRENCH photographer has recently been able to photograph objects under water. His apparatus consists essentially of a barrel filled with oxygen, surmounted by a glass, which holds an alcohol lamp. By means of a mechanical contrivance, powdered magnesium is



A CHIPPENDALE DOG GRATE: BY THOMAS ELSLEY.

thrown on the flame of the lamp, which flares whenever a view is taken. The equilibrium of the barrel is preserved by means of suitable vents in the bottom, which admit water as the oxygen diminishes.

A LADY connected with Liverpool has given to the Chapel of Ease of St. John, Walton Road, a Chalice of pure gold, with a cross of diamonds and pearls of enormous value.

THE Local Government Board not approving of the details of the new set of plans of the proposed new Board Room, at Poole, to cost £1,200, which have been forwarded to it, Mr. H. F. J. Barnes, Architect, has been requested to confer with an Architect to the superior Board in London on the matter.

AFTER a discussion lasting several hours, the Worthing Town Council on Monday decided to obtain the £110,000, required for the new sewerage and waterworks, by means of a private loan, in preference to the creation of Corporation Stock. The money is to be obtained at 3½ per cent., with £1,000 for commission, including stamps and legal charges.

A NEW stained glass window has been placed in Maxwell Parish Church, which completes the number of memorial windows on one side of the Interior. The window is the gift of Mr. Alexander Moffatt. The window is a very fine one, and is designed by Messrs. Ballantine & Gardiner, Edinburgh.

Trade and Commerce.

THE Peterboro' Brick Manufacture is increasing in a most rapid manner, and probably bricks in this locality can be manufactured cheaper than in any other district within an equal distance of London. The raw material from which these pressed bricks are made is locally known as "knots," the bed being of great thickness. These "knots" can be taken direct from the ground, and without either previous preparation or admixture of any kind, made by machinery into bricks, and the bricks stacked in the kiln ready for burning in less than ten minutes. This can be done all the winter, even during the hardest frosts. The raw material contains a great amount of natural fuel, and it is to this the cost of coal for burning the bricks is so very low. If a portion of these "knots" was enclosed in a vessel, with a pipe attached and enclosed in an ordinary house-fire, after the "knots" had become ignited, gas would be thrown off and could be lighted like coal gas. The bulk of the bricks made go to London and the district round, in addition to the towns and villages within a very large radius of Peterboro', the total output being probably one hundred millions yearly. The cheap and easy method of manufacture, the low cost of fuel, combined with the great and increasing demand, enables the brickmasters to successfully compete with other districts for the London trade. In addition to the pressed bricks large numbers of wire-cuts are made,

besides white-faced bricks, drain pipes, copings, plinths, bull nose, and many other kinds known in the trade as fancy shaped bricks. The trade is making many of the brickmasters rich men, the rapid and easy method of manufacture enabling them to reap large profits.

The Pneumatic Brushless Painter (Cleaver's Patent).

Thoughtful and observant men, accustomed to technical manipulation, have long been conscious that one particular process has not partaken of the general advance observable in other crafts. Thus, while the worker in iron and wood, stone and clay, is aided in his toil by improved tools and any number of labour-saving implements, the painter still does his work slowly and tediously with a brush. A new era would now appear to have dawned, and its advent was signalled the other day by a visit of several London Press representatives to the Barry Docks, Cardiff, to interview the subject of this notice and to witness its performance. This apparatus is designed to secure the rapid and effective

application of paints and varnishes to surfaces of all kinds without the intervention of a brush. This is effected by bringing the paint or varnish into an atomized condition, *i.e.*, into the form of a fine spray, so that it can be impinged or injected equally and evenly over the surface to be treated. The paint or other liquid to be applied is contained in a closed vessel into which air is pumped, whereby the paint is forced through a tube at a rate dependent on the pressure of the air supplied to the vessel. At the orifice of this tube, the stream of paint is met by a blast of air issuing from a nozzle, the blast being supported through a flexible tube whereby the stream of paint is pulverised and projected in the form of a spray, the blast being produced by a hand-operated air pump or compressor provided with a reservoir in order to render the blast continuous. The result is a uniformly level surface which the most skillful "layer on" would vainly attempt to rival in finish. In the process shown at the Barry Docks, the operator stood on a stage with the apparatus slung from the top of the work (the hull of the *s.s. Racine*), while the air pump at the bottom of the dock was worked by another man. At this test, eight feet (super) were covered with anti-fouling composition paint in six and-a-half minutes, and in another, an ordinary railway wagon was completely painted in sixteen minutes. Doors, window frames,

stencilling, &c., being done with equal rapidity. It is claimed that this machine will do, in one and three-quarter minutes, as much as a hand brush painter can accomplish in fourteen and a-half minutes. It will be seen that this invention will prove of immense advantage where much painting of a rough nature has to be done. It never occurred to any of the Press men present, beside our own, that the Pneumatic Brushless Painter is only an old delightful friend—the scent fountain—applied to the use of paint.

Messrs. Alfred Williams & Co., Hydraulic Engineers, 39, Great Eastern Street, London, E.C., exhibited at the Royal Agricultural Show at Darlington, one of their "Halladay" Standard Pumping Windmills, also a variety of pumps for working by hand and power. The Abyssinian or Driven Tube Wells were shown, also a complete set of Artesian Well Boring Plant, with improved steel socketed tubes for lining the bore holes. Messrs. Williams tell us that they have executed work for India, Turkey, Canary Islands, Balearic Islands, and France. A "Halladay" Windmill, erected on a Steel Tower, has just been fixed by them at Haslemere, Surrey, on Mr. John Grover's estate, and in connection with it is a set of three throw pumps, at the bottom of a well over 220 feet deep, and capable of delivering about 1,500 gallons per hour. It is contemplated using this Windmill for electric lighting purposes also.

Messrs. Joseph Kaye & Sons write us that under Professional Items, in our issue of the 18th ult., in commenting upon the Kirkstall Road Baths, we inaccurately accredited Messrs. Chubb with the manufacture of the Gold Key used at the opening ceremony. We are glad to know that this Key was designed and manufactured by Messrs. Kaye, and that they supplied the whole of the locks and fastenings fitted in the building.

The Self-Lock Roofing Tile Company.—We are requested to announce that from to-day, the address of this Company is 9, Gracechurch Street, City.

Glasgow.—The Glasgow Corporation Waterworks annual report states that during the year the amount expended on new works was £195,385, while the capital expended on the new works being constructed under the Acts of 1882, 1885 and 1892, now amounts to £1,086,377. Regarding these works, the report states that the new Reservoir at Craigmaddie is fast approaching completion. The Blane Valley section of the new aqueduct, 5½ miles long, was brought into use on the 30th April. The Loch Chon section, 3½ miles in length, is expected to be opened by the end of next month; and the Black Rig contract, and the laying of the double line of 48-inch pipe across the Endrich Valley are making fair progress. The laying of the 36-in. mains from the Craigmaddie Reservoir to the city is almost

finished. On an average the quantity of water sent into the city and district during the year was 46,866,029 gallons per day, an increase of 2,281,944 gallons per day compared with the previous year.

A Labourer's Action for Damages.—At the Shoreditch County Council, Robert Hilken, a dock labourer, of James Street, Commercial Road, claimed damages from William Richardson, a builder, for the death of his child Robert, a boy of nine, who was killed by the fall of a wall in James Street on March 24th last, on the occasion of a great gale. Mr. Eldridge appeared for the plaintiff, Mr. Rolland was for the defendant. Mr. Eldridge said this was an action arising out of an accident which happened as a consequence of the great gale on the last Sunday in March. Defendant had ordered certain buildings in James Street, of which he was the owner, to be pulled down. The whole of the insides of the houses were destroyed, leaving the outer wall standing as a bare shell. To save expense, no hoarding had been erected, and no struts were placed to protect the wall. About twelve noon on the day in question the wall fell into the street, burying three people beneath the ruins; one of them was the little boy whose father was the plaintiff in this action. A number of witnesses were called on behalf of the plaintiff.—Judge French, in giving judgment, commented strongly on the absence of the District Surveyor without any satisfactory explanation. Judgment was given for the plaintiff, the damages at £50, with costs.

Visit of Municipal and County Engineers to Messrs. Oates & Green, Halifax.—The Annual Meeting of the Incorporated Association of Municipal and County Engineers, taking place this year at Halifax on Friday last, many members of the Association were taken to view Messrs. Oates & Green's works at Horley Green and Ellen Royde. Messrs. Oates & Green, now one of our foremost firms, made a humble beginning, and bit by bit, by dint of hard work and perseverance, they have become one of the largest manufacturers in their line of business. They started in 1859 with a few hands, and now find employment for about 500 men and boys. The firm possess three works all within half-a-mile of each other: the Horley Green Pipe and Glazed Brick Works; the Ellen Royde Pipe, Retort and Fireclay Works; and the Beacon Fireclay and Common Brick Works. At Horley Green, the party was shown into the Pipe and Sink Sheds, probably the most extensive sheds used for such a purpose to be found in any fireclay works in England. These sheds have only just been completed, and were built to replace those which were destroyed in the gale of December last, by the disastrous fall of one of the chimneys. The sheds are furnished with all the latest steam pipe arrangements for regulating the temperature, and thus securing even drying. The pipe and brick making machines and grinding mills were also visited. Before leaving the Pipe

Department the visitors were shown the new Patent Pipe Joint with which we have already dealt and of which we think highly. Later, the party adjourned to the Ellen Royde Works. These have been entirely rebuilt during the past three years, these works are quite a model in their way. Here are produced large sanitary pipes up to 42 in. in diameter, with a strength quite equal to any of the cast iron pipes used for sewerage purposes. The machinery which makes them is wholly automatic and turns out a mile or two per week. In the Retort Shed a very large portion of space is devoted to the production of fire bricks and blocks for gas works, steel and iron foundries, glass and copper works. The firm received their guests with cordiality and courtesy.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

AMERSHAM.—For the erection of a villa residence near Amersham Station, for Mr. J. Sladen. Mr. Guest Luckett, architect, Aylesbury:—

Shelwin, H. H., Waddesden	£920	0	0
Darlington, G., Amersham	900	0	0
Read, C. W., Watford	869	0	0
Brown, E. J., Watford	845	0	0
Grist, G., Bierton, Aylesbury	798	18	0
Wallis & Sons, Chesham	795	0	0
Grimsdale, Aylesbury	786	0	0
Slarey, Aylesbury	722	0	0

ANGLESEY.—For erecting new farm buildings, for Lady Reade, near Llanfaethlu, Anglesey. Mr. Wm. E. Jones, architect:—

Pritchard, W. and O., Llanfair, P.G., Anglesey (accepted)	£315	0	0
---	------	---	---

ANGLESEY.—For erection of gardener's cottage, at Plasnewydd Park, Anglesey, for the Marquis of Anglesey. Mr. Wm. E. Jones, architect:—

Griffiths, Thos., Tynyngongl (accepted)	£208	0	0
---	------	---	---

ANGLESEY.—For the erection of farm buildings, Dragon Penynydd, Anglesey, for the Marquis of Anglesey. Mr. Wm. E. Jones, F.S.I., Anglesey Estate Office, Llanfair, P.G., architect:—

Griffiths, Thos., Tynyngongl, Anglesey (accepted)	£700	0	0
---	------	---	---

BRISTOL.—For proposed new schools and class rooms and alterations and additions to the Methodist Free Church, Oxford-street, Totterdown, Bristol, for the Trustees. Mr. Wm. Paul, architect, Wells-road, Bristol. Quantities by the architect:—

	School.	Church.	Whole.
Beavan, A. J.	£1,200	£970	£2,170
Hurford, J.	995	1,148	2,145
Church, Wm.	1,124	975	2,099
Wilkins, G. H.	1,088	980	2,068
Durnford, M.	1,060	915	1,975

* Accepted by the Trustees.

DORKING.—For making up Wathen road, for the Urban District Council. Mr. G. Somers Matthews, A.M.I.C.E., surveyor:—

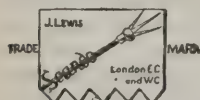
Steer, Edw., East Grinstead	£259	17	6
Franks, G. A., Guildford	245	1	0
Woodland, W. M., Dorking	225	5	0
Free and Sons, Maidenhead	220	0	0
Wheeler, W. H., London (accepted)	209	0	0

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

JOHN BENNETT, 32, Guilford Street, London, W.C.
GRANITE, MARBLE, MOSAIC & TILE WORK OF EVERY DESCRIPTION.
ESTIMATES AND DESIGNS FREE.
WORKS: 1, 19 & 20, BRUNSWICK MEWS, W.C.

GARTER & CO.
TILES MOSAIC
FAIENCE
Poole Dorset

TELEGRAMS—
"WEATHERVANE, LONDON."



J. LEWIS, 5 & 6, Great Winchester Street, LONDON, E.C.
LIGHTNING CONDUCTORS.

ELECTRICAL EXHIBITION CRYSTAL PALACE AWARD, 1892.

"LEWIS LINK," the only EFFICIENT COUPLING for Conductors. PATENT No. 16,641

SEE SECTION FIG. 2.

VILLAS,
MANSIONS,
SCHOOLS,
CHURCHES,
FACTORIES,
CHIMNEY SHAFTS,
&c.



ROBT. ADAMS, 67, Newington Causeway, London, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self Compensating

SPRING HINGES

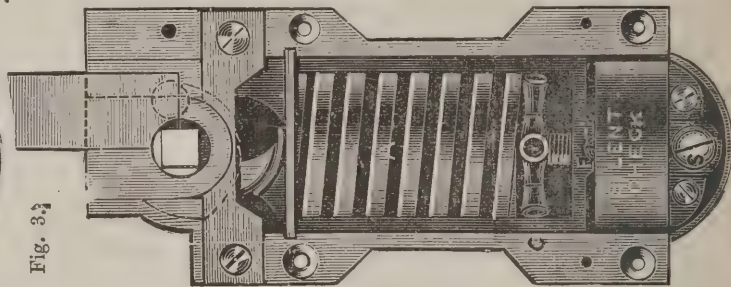
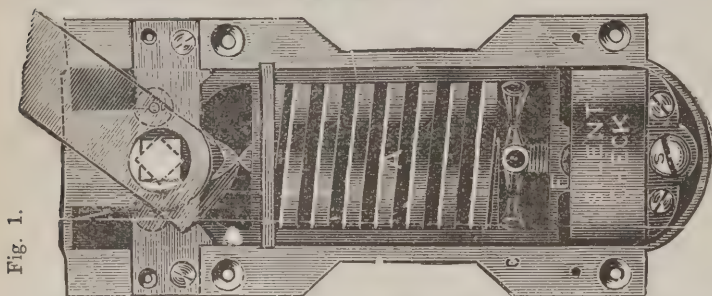
Guaranteed to last
longer and work better
than any hitherto
made.

CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to and
closes from the angle
of 135°

Fig. 3 is the new
Single Action Spring.
It opens to and closes
from the angle of 180°,
i.e., "wide back."

THE FIRST
SPRINGS EVER
PRODUCED WITH
THESE GREAT
ADVANTAGES.



DULVERTON.—For building stone piers for steel bridges over the rivers Exe and Barle, and constructing road called Perry-road in connection therewith. Mr. W. J. Wilcox, engineer, Bath. Quantities supplied by Mr. Chas. Finn, Exeter:—

Facey, R. R., Taunton	...	...	£1,490 0 0
Smith, J., Minehead	...	...	1,275 0 0
Gunn and Tarr, Tiverton	...	...	1,138 15 10
Bond and Hitchcock, Taunton*	...	...	1,110 0 0

* Accepted.

EXETER.—For the erection of a new wing for seventy-five beds at the Devon and Exeter Hospital, exclusive of heating, plumbing, &c. Mr. Charles Cole, architect, 50, High-street, Exeter:—

	A	B	
Gibbard, J. R.	£350	£200 0	£9,888 0
Trevena, W.	275	200 0	9,496 0
Lapthorne and Co.	180	—	8,000 0
Julian, J.	297	300 0	7,983 0
Phillips, A. E.	250	—	7,513 0
Setter Bros.	266	—	7,470 0
Westcott and Austin	375	250 0	7,400 0
Stevens and Son	300	200 0	6,997 0
Mudge, E.	400	600 0	6,957 0
Pratt, N.	200	225 0	6,039 0
Gibson, W.	180	200 0	6,800 0
Ham and Pasmore	357	—	6,608 0
Herbert, G.	120	95 5	6,508 15
Tree and Bolley, Exeter*	295	200 0	6,445 0

* Provisionally accepted.

A. Extra price for building brickwork in cement.

B. Extra price for completing the work in twelve months.

FARNBOROUGH.—For erecting four houses at Farnborough, for Mr. Bridger. Mr. W. E. Trevena, architect, Farnborough. Geo. Munell, Blackwater (accepted). The lowest of five tenders received

FRODSHAM (CHESHIRE).—For erecting a gardener's lodge, Netherton, for M. Steele, Esq., M.D., J.P. Messrs. Linaker and Son, Architects:—

Shallcross, Thos., Ashton	...	...	£584 0 0
Davies, Thos., Frodsham	...	...	549 0 0
Gleave, Geo., Frodsham	...	...	529 0 0
Littler, John, Frodsham (accepted)	...	...	520 0 0

FRODSHAM (CHESHIRE).—For erecting additional wing to residence, "Netherton," Frodsham, for M. Steele, Esq., M.D., J.P. Messrs. Linaker and Son, architects:—

Forester, Geo., Chester	...	...	£1,880 0 0
Davenport, C. W., Warrington	...	...	1,580 0 0
Whittingham, E., Newport, Salop	...	...	1,500 0 0
Davies, Thos., Frodsham	...	...	1,482 0 0
Shallcross, Thos., Ashton	...	...	1,449 0 0
Gleave, Geo., Frodsham	...	...	1,395 0 0
Littler, John, Frodsham (accepted)	...	...	1,382 0 0
Collinge, Rd., Runcorn (Plumbers' work)	...	...	89 3 0

FRODSHAM (CHESHIRE).—For erecting three dwelling houses for Mrs. Bowden, Overton Hall. Messrs. H. Linaker and Son, architect:—

Beckett and Co., Hartford	...	...	£1,084 6 0
Clarke, L. H., Frodsham	...	...	893 0 0
Gleave, Geo., Frodsham	...	...	882 0 0
Littler, John, Frodsham (accepted)	...	...	873 0 0

LETTERKENNY (Co. Donegal, Ireland).—For plumber's work at the District Lunatic Asylum, for the Board of Control of Lunatic Asylums in Ireland. Mr. Wm. McElwee, Foyle-street, Londonderry, architect:—

Rooney, Jas., Londonderry	...	...	£5,276 0 0
Baird, Wm., Dublin	...	...	4,785 0 0
Williamson, A. D. and Co., Coleraine	...	...	4,120 1 9
Mitchell, Andrew A., Letterkenny	...	...	3,075 9 1
O'Neill, J., & Co., Omagh	...	...	3,870 11 11

* Accepted.

LONDON.—For alterations and additions at the Chatsworth Arms, Lower Clapton, for G. T. Poole, Esq. Mr. G. S. Stevens, architect:—

Parsons, F.	...	...	£1,353 0 0
Simpson Bros.	...	...	1,249 17 0
Wales, G.	...	...	1,099 11 0

LONDON.—For alterations to house at Westminster for the Hon. Alfred Lyttleton. Mr. Richard Creed, architect:—

Fleming and Watson	...	...	£2,088 0 0
Scott, S. J.	...	...	1,450 0 0
Leslie and Co.	...	...	1,290 0 0

LONDON.—For alterations at The Unicorn Tavern, High-street, Shoreditch. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C. Accepted for 1st contract for structure:—

Hood, A.	...	...	£966 0 0
----------	-----	-----	----------

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and
specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

LONDON.—Accepted for structural works at The Old King's Head, Tooley-street. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C.:—

Parsons, W. T., Deptford	...	...	£120 0 0
Goodall, contractor	...	...	£1,274 0 0
Heath, barfitter	...	...	580 0 0
Winn, gasfitter	...	...	104 0 0

LONDON.—Accepted for alterations to The Crown Tavern, 418, Mare-street, Hackney. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C.:—

Green and Smith, contractors	...	...	£1,396 0 0
Heath, barfitter	...	...	171 0 0
Winn, gasfitter	...	...	172 0 0

LONDON.—Accepted for alterations at The Britannia Tavern, 353, Wandsworth-road. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C.:—

Hayworth and Sons	...	...	£2,085 0 0
-------------------	-----	-----	------------

LONDON.—Accepted for alteration to The Iron Bridge Tavern, East India Dock-road. Mr. R. A. Lewcock, architect, 88, Bishopsgate-street Within, E.C.:—

Simpson and Cove, contractors	...	...	£1,020 0 0
Heath, barfitter	...	...	188 0 0
Dix, gasfitter	...	...	68 0 0

LONGFORD (IRELAND).—For the erection of 40 cottages, class A., and 20 cottages class B, for the Longford Town Commissioners. J. W. Gunnis, County Surveyor, Longford. Lowest of four tenders accepted:—

Kelly, Patrick, Earl-street, Longford,	...	...	£85 0 0
Class A. (per cottage)	...	...	105 0 0
Class B. " "	...	...	105 0 0

NOTTINGHAM.—For the erection of St. Catharine's Church, Nottingham. Mr. Robt. C. Clarke, architect:—

Smith, William Newark, (exclusive of foundation and fittings)	...	...	£5,050 0 0
---	-----	-----	------------

NOTTINGHAM.—For the erection of chancel and organ chamber at St. John's, Butler's Hill. Mr. Robt. C. Clarke, architect, Nottingham:—

Vickers, J. H. (accepted)	...	...	£756 0 0
---------------------------	-----	-----	----------

PORTAN (Co. Meath).—For the erection of a new residence at Portan (near Batterstown railway station), Co. Meath, for Mr. Nicholas Delany. Messrs. A. Scott and Son, Drogheda and Navan, architects:—

Piggott, J., Navan	...	...	£1,250 0 0
O'Brien, P., Co. Meath	...	...	1,085 0 0
Hanway, P., Georges Street, Dublin*	...	...	1,065 0 0
Delany, N., Athlumney, Navan	...	...	1,000 0 0

* Accepted.

POTTERS BAR.—For additions to Schools, Little Heath Potters Bar, Herts., for the Building Committee. Mr. J. R. Manning, architect, Milkwood Estate Office, Herne Hill S.E. Quantities by the architect:—

Holliday and Greenwood	...	...	£497 0 0
Hunt, J.	...	...	475 0 0
Willmott and Son	...	...	430 0 0
Warboys, J.	...	...	425 0 0
Groom, W.	...	...	400 0 0

PURTON STOKE (WILTSHIRE).—For erecting school at Purton Stoke, Wilts. Mr. W. H. Read, architect, Swindon:—

Barrett, T.	...	...	£690 0 0
Williams, J.	...	...	675 0 0
Smith, H. C.	...	...	674 15 9
Wiltshire, G.	...	...	647 0 0
Shailes, J.	...	...	505 0 0
Barnes, E. Purton (accepted)	...	...	500 0 0

LONDON.—Accepted for sanitary work to 6 houses, Elsworth-terrace, Primrose-hill, N.W. Mr. Fred. W. Hyde, surveyor:—

Smith, G. and A., Pimlico	...	...	£543 10 0
---------------------------	-----	-----	-----------

SHIREBROOK (DERBYSHIRE).—For the erection of school buildings, &c., for the Plesley School Board. Mr. Fredk. Ball, architect, 5, Hound's-gate, Nottingham:—

Shaw, J.	...	...	£3,550 0 0
Eastwood, A.	...	...	3,500 0 0
Fisher Bros.	...	...	3,500 0 0
Collingham, J.	...	...	3,500 0 0
Maule, W.	...	...	3,495 0 0
Bell, A. G.	...	...	3,416 0 0
Vickers, J. H.	...	...	3,363 0 0
Oscroft, John, Nottingham (accepted)	...	...	3,357 0 0
Greenwood, J.	...	...	3,333 0 0
Shaw, W. E.	...	...	3,199 0 0

SOEWBY BRIDGE.—Private street improvements, Newton-street, Peel-street, and Egerton-street, Tulse-lane, Sowerby Bridge. F. B. Rollier, surveyor to the District Council.

Bellfield and Barnes, Sowerby Bridge	...	...	£494 0 4
Stutcliffe, William, Sowerby Bridge	...	...	450 0 0
Foulds, Richard W., Halifax	...	...	433 3 4
Kitchen, Thomas, Halifax	...	...	393 19 10
Harrison, Barraclough, Brighouse*	...	...	371 12 5

* Accepted.

ST. MARY CRAY (KENT).—For restoration of side windows, &c., of St. Mary's Parish Church. Mr. Arthur Vernon, architect, 29, Cockspur-street, London:—

Page, Samuel	...	...	£239 0 0
Knigh, Thomas	...	...	235 0 0
Low, Robert A.	...	...	229 0 0
Potter, J. (accepted)	...	...	200 0 0

STONE.—For the erection of cottage in the Erghorpe-road, for Mr. Thos. Monk. Mr. Guest Luckett, architect, Aylesbury:—

Wallis & Sons, Chesham	...	...	£227 0 0
Grimsdale, Aylesbury	...	...	217 0 0
Siares, Aylesbury	...	...	190 0 0
Senior and Clarke, Wendover	...	...	186 18 8

STRATTON ST. MARGARET (WILTSHIRE).—For extending vagrant wards at the Union Workhouse, Stratton St. Margaret, Wilts. Mr. W. H. Read, architect, Swindon:—

Williams, J.	...	...	£595 0 0
Barrett, T.	...	...	584 17 6
Wiltshire, G.	...	...	575 15 0
Looker, Stratton	...	...	558 10 0

STRATFORD.—For the erection of a block of buildings to be known as the Water-lane Pupil Teachers' Centre, Stratford, E., including examination hall, for the West Ham School Board. Messrs. J. T. Newman and Jacques, 2, Fencourt, E.C., architects. Quantities by Messrs. R. L. Curtis and Sons:—

Kerridge and Shaw	...	...	£11,855 0 0
Battle, Son, and Holmes	...	...	11,797 0 0
Catley, J.	...	...	10,569 0 0
Reed and Son	...	...	10,492 0 0
Stimpson and Co.	...	...	10,233 0 0
Kirk, Knight & Co.	...	...	10,200 0 0
Maddison, W. J.	...	...	10,175 0 0
Girling and Coe	...	...	10,050 0 0
Gregar and Son, Stratford (accepted)	...	...	9,830 0 0

TOLLESBURY.—Tenders for new girls and infants school for the Tollesbury School Board. Mr. P. M. Beaumont, architect, Maldon:—

Dobson, G., Colchester	...	...	£3,364 0 0
Wilding, T., Maldon	...	...	3,250 0 0
Orleur, C. E., Colchester	...	...	2,948 0 0
Girling and Coe, Ipswich (accepted)	...	...	2,786 0 0
Saunders and Son, Dedham*	...	...	2,760 0 0

* Withdrawn.

WESTON-SUPER-MARE (SOMERSET).—Accepted for the purpose of altering two villa-residences, Clarence Park-road, for the erection of a school, for Mr. W. Franklin. Mr. Sydney J. Wilde, architect, Weston-Super-Mare:—

Dubin, Wm.	...	...	£1,060 0 0
------------	-----	-----	------------

SPHINCTER WORKS, EMERSON STREET, LONDON, S.E.

High Grade Flexible Hoses for
Contractors, Engineers, Builders.
FIRE HOSES & HYDRANTS.
HOSES FOR CLEANSING WITH WATER POWER.

Pumping, Suction, & Dredging Hoses.
Always specify "SPHINX" Brand.

The Builders' Journal.

Vol. I., No. 22.

Tues., July 9, 1895.

ILLUSTRATIONS.

"The Cub Stealer": By Henry Teixeira de Mattos 337	The Proposed North British Hotel, Edinburgh.... 346
The Nave, St Mary Overy:	The View of Calton Hill, Edinburgh, as it is..... 347
Burke Downing, Architect 341	The View as it will be..... 347
A Sketch by F. T. W. Goldsmith..... 343	Interior of St. Mark's, Venice: By H. L. Florence 348
Plan of the New Cathedral, Westminster..... 344	"A Crucifixion": Teixeira de Mattos..... 349
Sketch of the Nave of the Cathedral:	
J. F. Bentley, Architect 345	

CONTENTS.

Found—A Site 337	"Gainsboroughs" as an Investment 344	Henry Teixeira de Mattos 349
In the land of Chaldea..... 337	Men who Build, No. 20.—	The Famous Speeton Clay: Yorkshire
Room and Air..... 338	Mr. John Francis Bentley 344	Geologists at Filey 349
A Northern Egyptologist's Collection:	"The Destruction of Edinburgh": A chat	Professional Items..... 350
"Dark Ages" and "Brilliant Periods"	with the Marquis of Tweeddale..... 346	The Organ in Bach's time 351
of Art 338	Restoring a Welsh Church 346	Society Meetings 351
The Books of the Batsfords: Holborn Fifty	Leeds Notes 347	Correspondence: The Architecture that
Years ago..... 339	The New Chimes at the Royal Exchange.. 347	must be Original 353
Bricks and Mortar..... 340	Pottery of Five Thousand Years ago 348	

Found—A Site. WHY not a National Opera House? asks a correspondent who has found, alas, only the site. Paris, Vienna, Berlin, may be forgiven their pride in theirs; London has no National Theatre. If Mr. A. W. Hutton had found the money, his scheme might have looked healthier, though even sites are getting difficult in London. But the British Public is to be purse-bearer, meanwhile Mr. Hutton finds the site. It is the large unoccupied space opposite the Horse Guards. We might be induced to admit the justice of the site, and we are cordially enthusiastic in any project that will enhance the general *ensemble* of what, in vulgar parlance, is described as "the finest site in Europe"—from Trafalgar Square to Westminster Abbey. It is true also that a National Opera House would give a much-needed opportunity to Architecture, but we are afraid that that would be the only opportunity it would yield. Why not a National Opera House is simply answered. There is no National Opera. No Englishman of the hour appears able to compose grand opera; we go to Italy, to France, to Germany for our musical comedies, and serve up comic opera as side-dishes. Covent Garden Theatre does fairly well for the one, and half-a-score of private Theatres for the other. Mr. Hutton's suggestion that the "Opera House"—once built—be "leased at a moderate rent to the County Council," makes us cry out to our gods and little fishes. The County Council is a useful body in many ways, but Colour and Orchestration have perplexed it before now. What would happen, granting grand opera, we cannot, stretching our imagination to its uttermost, conjecture. Nothing more terrible can be conceived than a National Opera "attitude" on tragic themes, or a County Council with its cast-iron convictions engaged in settling musical morals. It has been well said that Music has no morals. The County Council had better leave that Well alone—it is bottomless.

In the Land of Chaldea. The Babylonian Tablets now on view in the new Assyrian Room of the British Museum are of such remarkable interest that archæologists and lovers of antiquities should lose no time in recommending them, so to speak, to their friends. Business men might



"THE CUB STEALER": BY HENRY TEIXEIRA DE MATTOS.

be coaxed into a visit. Here, once again, the marvellous universality of Babylonian documents and monuments is demonstrated, in this regard surpassing the records of Egypt. Odd, it indeed is to have to recognise in these little packages of clay—each with its clay cover—the business records and legal deeds of a trading firm, who, at

least forty centuries ago, were the leading representatives of bankers in the land of Chaldea! We now know that from the very earliest times the southern cities of that land, particularly, had become the centres of wealthy trade; finance had grown, and the farmer went into his near Chaldean town much as the farmer of to-day goes to his county town, to bank. These tablets clearly demonstrate that in the twenty-fourth century before the birth of Christ there were trading guilds in such cities as Ur, Sippara, and Larsa, and that such a guild was being organised in Babylon—a new city in those dim distant days. These tablets, which were the discovery of Dr. Budge during his comparatively recent excavations at Deir, have been added to the small existing Collection, and the evidence of these early trading guilds has thereby been greatly strengthened. The tablets are of the kind known as envelope tablets, being in duplicate. A small piece of clay is inscribed with the legal record of the transaction, and round this a clay envelope is enfolded upon which the deed is written a second time; both copies being attested, dated and sealed. Dr. Budge discovered the tablets, stored in jars, in long narrow chambers, and found that they chiefly referred to the period B.C. 2300-2000, according, nevertheless, with the commercial and legal directions given to Jeremiah centuries later! One tablet tells of the sale of "a whiteslave from the land of Gatum"—South Kurdistan; in payment thereof the trader received "240 measures of oil." These marvellous discoveries prove that the business methods of those remote times varied little from our own, save that finance was entirely

on a silver tariff, the ingots being weighed. Laws were strict, commerce was conducted on legal lines; slave dealers, money lenders, lawyers, merchants, all at work. The 'cute deal; the reprisal; the cancelled contract; the case in court; in Chaldea four thousand years ago! How old, how very old are all the smart schemes of our vaunted modern age.

Room and Air!

We have read with interest, mixed with a little preliminary alarm, a paper on the "Physiology of Recreation," by Mr. Charles Roberts, in the current *Contemporary*. Is Recreation, we asked, also to become a matter of Science? Is our Leisure no longer our own? A man will die hard for his leisure; dog-like, he clings to it. But Mr. Roberts has masked in a modern phrase a plea for mirth and muscle. He demands "Air and Room;" he puts in a word for Street Architecture, and, as Air and Room and Street Architecture concern ourselves, we are glad to back up Mr. Roberts. We must split a truth with him, to begin with, however. "The saddest feature of our modern social condition and overcrowding in towns is that children have forgotten how to play." *Educated* children, Mr. Roberts should have interpolated. It is Education—we say it fearlessly—that is responsible for the ten-year old men and women who dine with us, and then pass their judgment upon the play! Education should go farther or retreat; it has not yet recognised that the body is the steam boiler of the individual; that the brain is the delicately-organised engine. Boiler—and engine! Our forefathers, it may be, were all boiler, but are we not all engine? So, taking the educated child in the "middle" and "lower" classes, we agree with Mr. Roberts. The Public Schools of England—Rugby, Eton, Harrow, Uppingham, Malvern—alone estimate, at its right value, the right arm that, together with the clever head, or even without it, has made England great in the conquests of the World. By all means, then, let us have the "Air and Room" that Mr. Roberts demands, and the enlarged playgrounds for city and town Schools, and the teachers who have played themselves and still know how to play; and the keen competitive rivalry of the grand old games; and the element of Physical Culture that really makes as much for the happiness of existence as a schooled intellect or o'er much philosophy. And, for all the pessimism about children, we know corners of Clare Market or Seven Dials where children can be found, any evening, shouting with delight. We have watched for hours the little untutored lasses of London, hatless, without speaking acquaintance with soap tablets, dancing to Italian organs in perfect step and rhythm, free and lithe and happy, having forgotten Rule of Three, Board School restrictions, and the Official Frown. And so it is not yet too late: Let us go back to the Greeks, for a little of their exaltation of physical beauty; let us cease making the children top-heavy with a weight of learning, tottering upon broken reeds of limbs. Mr. Roberts is even more right when he comes to the elders; it is no recreation for the agricultural labourer to go and dig on his allotment in the evening when he has been ploughing all day; no recreation for the brain worker to change his pen nib and his book. "Take the hint" says he, "make the streets more beautiful, orderly, instructive, Architecturally and otherwise; throw open Picture Galleries, Museums on Sundays, still more Parks and Gardens!" Let the hint be made a mandate by all means. Schools and Codes, Curriculums and Systems abound; we lose our individuality beneath them; would the children of to-day *gain* theirs? Let us give them "Room" then, at once—and "Air."

THE National Monument to Sir John Macdonald was unveiled in the Parliament Grounds at Ottawa on Tuesday last.

VISCOUNT BRIDPORT has arranged for a collection of his porcelain and decorative objects to be put up to auction in London in the near future. The "lot" that is likely to attract most attention is a fine marble bust of Lord Nelson, by J. Flaxman, R.A.

A NORTHERN EGYPTOLOGIST'S COLLECTION.

"DARK AGES" AND "BRILLIANT PERIODS" OF ART.

MR. R. C. CLEPHAN, of Southdene Tower, Low Fell, whom members of the Newcastle Society of Antiquaries recently visited, is an enthusiastic Egyptologist, and the purpose of the visit was to inspect his Collection of Antiquities. Mr. Clephan had his treasures admirably classified, and described them in an interesting way; having something to say, also, concerning the ancient Arts of Egypt, with which he has made himself familiar. Sculpture and Painting, he said, go back into the remote past of ancient Egypt; indeed, as far as we could learn, as early as Architecture itself. The oldest examples of buildings, beyond those of the most primitive, contained, more or less, delineations of the forms of men and animals in wood, stone, clay or pigments. These representations were, however, mostly confined to the Tomb and the Temple. Indeed, the influence of Religion upon Art, in all its branches, was simply immense. A glorious immortality was a living faith with this interesting people, and everything was made and done with that end in view. These Arts, Sculpture and Painting, were inseparable allies on the banks of the Nile from the earliest period yet disclosed, owing to the inexorable canon that every figure must be coloured, painted or enamelled. The Egyptians were apt to conventionalise from the earliest periods, and this came out strongly both in form and colour. Flesh tints, as far back as the Fifth Dynasty, were strictly stereotyped—the male being always coloured a reddish brown and the female a pale yellow. These and other conventionalities had their origin in pre-historic times, and they ruled Egyptian Art throughout all its phases and periods to its close. The Egyptian mode of treating the human body in drawing appeared most strange to us. They tried to show every part of the human frame in a profile drawing; the eye, arms, and shoulders presenting a front, and the lower portions of the body a three-quarter view. They were eminently realistic in their treatment of both Arts; but neither humour nor caricature was lacking. The earliest example we had in Sculpture was the Great Sphinx, which was pre-historic, and characterised by both power and subtlety of a high order. In Architecture, he would not be far wrong in assigning the Temple to the same uncertain period. Models for the Schools in the Pharaonic ages were most interesting, and he had been fortunate in securing one. It was cut in soft limestone, and was probably a bust of the reigning Pharaoh. The position of the features was determined by the cubic block being squared in lines, and these squares were seen on the reverse of the bust almost as distinctly as when they were made, thousands of years ago. The bust dated to probably between the Nineteenth and Twenty-sixth Dynasties, and was, therefore, about 3,300 years old. Mr. Clephan next exhibited an artistic and beautiful figure of Isis, probably belonging to the Third or Fourth Dynasty. The head of a figure closely resembling the Sheykh-el-Beled at Gizeh was very striking. The ancient Egyptians rather illuminated than painted, as we understood the term, and this branch of Art was the handmaiden, so to speak, of Sculpture. The treatment of both men and animals was, in a sense, very faithful to nature. There was but little attempt made in the direction of perspective. One striking fact must not be overlooked: that in pre-historic times—that was to say in periods anterior to Menes, who reigned probably nearly 7,000 years ago—Art must have served a long apprenticeship to have attained the level at which we found it. The recent find near Memphis by M. de Morgan exhibited the goldsmith of the Third Dynasty at his best. The period covered by Egyptian Art was a vast one, dark ages alternating with brilliant periods of progress; then Decadence and Renaissance following each other in a positively bewildering manner. Mr. Clephan was not able to illustrate the Art of Painting by many original examples, as the frescoes were painted mostly on plaster; but he exhibited some original

work on wood and cloth, and several beautiful copies of fresco painting, giving an excellent idea of the treatment and technique of the Egyptian Schools. He displayed, also, some very interesting specimens of weaving, in which handicraft the Egyptians excelled from an early period. Herodotus mentioned the use of the loom in Egypt. The linen was especially very smooth and soft. Embroidery was practised early, and Mr. Clephan exhibited a specimen which was about 3,500 years old. There was also included in Mr. Clephan's Collection a most interesting series of scarabs. These were fashioned on the model of the Khafer beetle (scarabæus sacer), which was the emblem of terrestrial and celestial life. The scarab was worn in life as a charm against death; and in death a large variety, inscribed with the Thirtieth Chapter of the Book of the Dead, was put inside the mummy in place of the heart, which was removed with the viscera, and preserved in the sepulchre with the mummy, in a vase. Scarabs were found in great quantities, in various sizes, and cut in many substances—limestone, granite, and precious stones. Many were enamelled in green, turquoise, and lapis lazuli. Some were inscribed with royal and other cartouches, others with various cabalistic or ornamental devices, the meaning of which was known only to the wearer. The smaller scarabs were used as phylacteries, or as ornaments strung into necklets, or bracelets, or as earrings. His own Collection was somewhat extensive, and all varieties were well represented. Mr. Clephan also exhibited examples of Egyptian, Ptolemaic, and Roman lamps, funerary cones representing the stone bread for the Ka, or shadow (the mummy being provided with the real article, a piece of which was handed round), vases, figures of men and animals, beads, and other things. The inscribed potsherds were curious, as representing the ruder written communications of the people, such as receipts for money and goods, letters, and messages of various kinds. As to metals: as might be seen from the Beni Hassan Frescoes, the Art of Smelting was an early one in ancient Egypt; but it went back further than that. Gold, silver, iron and lead were all used in the early dynasties; but bronze was the favourite metal after the Eighteenth Dynasty, before which period he did not think it was known. The description generally used contained 84 per cent. of copper, 14 per cent. of tin, and a little iron. The number of Art objects found in this metal were countless, and it was largely used for domestic utensils. The gold work was of a high order of merit, and until quite recently it was supposed that the oldest examples went no further back than the Fourth Dynasty; but in that land of surprises some highly artistic specimens had just been found of the Third. This discovery carried us back to a period more than 6,000 years ago, and it was both startling and suggestive to find such beautiful design and excellent workmanship at a period so very remote.

At a meeting of the Edinburgh Town Council Mr. W. N. Colam, M.I.C.E., was, in conjunction with Mr. Cooper, the Burgh Engineer, elected Engineer for the construction of 18 miles of cable tramways which are to be laid down at once in the City.

THE sale of a Church by public auction deserves to be recorded. In consequence of the union of the West and South United Presbyterian congregations in Duns, the Church of the former was no longer required by the congregation. It has just been put up to public competition, and knocked down at £170. It cost £2,000 to erect seventy-four years ago.

OVER 4,000 square yards of land at the northern end of the town of Douglas is to be purchased at 9s. 3d. per yard for the purpose of providing Elementary School accommodation for 1,000 children, and Bourne Hall is to be rented at £5 per annum for the same purpose.

A LARGE earthenware jar, not more than 6 in. below the surface, filled with small Roman copper coins was found during some excavations on Mr. Harry McCalmont's estate at Bishop's Wood, Hereford. A second vase, also full of similar coins, was found. The majority are of the reigns of Constantinus the Great and Constantius, A.D. 338-360.

THE BOOKS OF THE BATSFORDS.

HOLBORN FIFTY YEARS AGO.

NIGH on for half a century ago, when Holborn was still Holborn, and had not run away—by means of Viaducts—to the City, when much of the elder-fashioned still faced the traffic bravely, and it was possible to be sure of your bed and beef at your Inn, many booksellers had their shops, with open fronts, tempting the passer-by, and old scholars knew no other Mecca. Booksellers and publishers were modest men in those days, issuing or handling books with reverence and gentility, not as if they were a crop of sudden summered strawberries in Covent Garden Market. A book was a book, to be bought or hungered after; possibly one walked in for a timid "look round," darting out if the bookseller approached you, all too conscious of the only halfcrown in your pocket. And yet those stolen peeps into plates and pre-



faces; those hidden glimpses of the glorious World of Letters; those curves of beauty; and, of course, those steel engravings; were they not the Promised Land, a Paradise for students without the gates? It was on this sparer manna that many of our greatest men were bred and fed, and in those slower days when books were fewer and worthy of a lifetime's toil, there grew up a race of ardent, significant men, whose like it is not easy to match to-day. And yet more books were bought than one would think, for Architects at least denied themselves and were content to live and die in the neighbourhood of Holborn or Bloomsbury, and had not come to dream that they should build houses unto themselves.

Perhaps it was on such a silent day that B. T. Batsford, bookseller, 52, Holborn, began to put up the shutters of his open shop with a feeling in his heart that in the depths of future days there could be no "lower deep." He had not sold book or pamphlet; no one had even asked the price of a "work;" the story does not say if a bookworm had bored his way, humbly, in and out. But just as the bookseller was jamming the last bar home through the last wooden shutter of that old style of shutter that keeps its fellows just and firm and upright, someone came and asked if he had a book upon "The Dog." It happened that Knight was publishing quite a cheap, useful series (the masses were beginning to enquire for such) upon animals. "Oh, yes! I have a book upon the dog." "What is the price?" "Sixpence." The enquirer went home with the equipment of a veterinary surgeon, and Batsford turned over his sixpence for luck.

From that quiet and quite simple beginning the Batsfords, father and sons, have built up their publishing business, and can show you, moreover, a stock of Architectural books unrivalled in England. They publish, they purchase; and it is the easiest thing to find Mr. Batsford in his "shop," though now it has a front and plate glass, I dare swear.

Seventy-four years ago, in a Hertfordshire village, Mr. B. T. Batsford was born. Even Hertfordshire villages were not absolutely at peace in those days. The Lord of the Manor turned an angry eye upon a number of his tenants, and the tenants fled to London for shelter and bread. Mr. Batsford's father came up with his young family, and at twelve years of age Bradley Thomas was apprenticed to Bickers, who sold books at high prices and believed in his apprentices working pretty well a sixteen hours' day.

"It was go up to the top storey for this and to the cellar for that," says Mr. Batsford, "and a meal when you could. Apprentices were apprentices in those days."

I dare say young Batsford had his share in the running among the Theological and Architectural tomes that were heavy enough to bend a man's back. Looking at some old catalogues, lent me by the firm of "Taylor's Architectural Library, No. 56, High Holborn"—Taylor stood pretty well where Mr. Batsford did in 1849—I find "Dr. Brook Taylor's Method of Perspective Made Easy, both in Theory and Practice,"—which surely must have been a comforting work—and "The Perspective of Architecture: a Work entirely New" (how many books have claimed that!) "The Carpenter's Pocket Directory" and "Crunden's Convenient and Ornamental Architecture" cheek by jowl.

Taylor's Library was a well-known resort at the beginning of the century, and "The Antiquities of Athens" were in their Fourth vol. in 1825. Mr. Batsford shakes his head if you enquire if the young student of to-day is exactly consumed with a burning thirst for information upon "The Antiquities of Athens."

"Architects cared more to form libraries in those days, and educated men all thought it necessary to include in their libraries at least a few Architectural works of repute. Many of the best collections were made fifty years ago, when Weale was a great publisher of such books, but he was very high priced. Yet I think it was quite as easy to sell a dear book then as it is now. Weale sold his second-hand collection of books in 1860, and that was my opportunity. I bought all I could, and soon on my shelves were to be seen Theological, Architectural, Engineering, and Mining books in friendly fellowship."

By-and-bye Mr. Batsford tells you why the Theological books lost ground; the prelates and parsons of that stiff-necked day were prone to argument, but, as it seemed to Batsford, too intolerant of view; the broader minds and moods had not yet come into play, and the bookseller was a broad-minded man.

And princely purchases were made, now and again, at the shop in Holborn.

"Once an Indian Prince came, with his suite and his interpreter, and, of all books, what do you think he wanted? A book on Candle Making. We found him his book on that Art, and sold him hundreds of pounds' worth of books on other Arts, and they had to go to the Bank of England to replenish their exchequer before they could pay. That was something like a day!"

"Very different," I said, "to 'Do you keep a book about The Dog?'"

Mr. Batsford runs on in anecdote once you get the wheels of memory turning, and I am told of the rage for modern antiques in the way of fittings and furnitures upon the Gothic movement, and, later, the Renaissance movement coming into vogue.

"There was a shop in Holborn where the supply of real antiques ran out every day, but the shopkeeper had workrooms at the back where they turned out new real antiques. His customers were always made happy, for if he had not got what they wanted in stock, he was always attending a sale the next day. So they brought forth, from the back, more real antiques."

Even big Architects took humble positions—upon occasion. Mr. Batsford often saw Wyatt go on his hands and knees rummaging for ideas among gigantic and musty old folios, many of them French or German, and virgin ground—to English Art.

"The young men, too, especially in the railway surveying days, were not without their perquisites and their pride, and in the heyday of those times even a junior was said to earn his guinea a day for carrying the chain!"

Mr. Batsford has many other good stories in stock as well as books; he should write his Reminiscences of Old Holborn; of the days when Architects looked grave men at twenty-five; of the studious nights those fellows spent, treasuring a snapped-up second-hand volume; of the open shop fronts and the booksellers Dickens knew so well how to prove had hearts and consciences. Many a time, no doubt, in the dull gloom of winter nights, when the gas lamps flickered and bleared in old Chancery Lane, Dickens went by with his rapid eye,

though Mr. Batsford never knew him enter the shop.

Presently we talk of Style in Architecture—*bête noir* of Ernest Newton—Mr. Bradley Batsford, eldest son of his father, and I, and he tells me more than one significant thing. "Do you know, no English Architectural books of any moment have been published for twenty-five years! Foreigners come to us—Germans particularly. 'Where are your English works, your books on current Architecture?' 'We haven't got any,' we say. 'Practically, there are none.' They are astonished, and well they may be! You will remember Gotch's *Architecture of the Renaissance in England*; that is one of the more important works we have published. We are now endeavouring to do something worthy English Architectural reputation; for instance, our portfolio (soon to be published) on *London Churches of the XVII. and XVIII. Centuries*, and another important work on the Architecture of what we have ventured to call the "Later Renaissance in England," which will be edited by Messrs. John Belcher and Mervyn E. Macartney, and will to some extent form a sequel to Mr. Gotch's work."

I am shown delightful plates, marvellous impressions of the work of Wren and Inigo Jones, of Hawksmoor and of Gibbs. For the first time London Churches are to be done full justice, and one cannot but commend the enterprise of the Batsfords in publishing sixty-four plates with letterpress, by G. H. Birch, F.S.A. three guineas. Here is a permanent pictorial record of London's Churches, timely enough, ere some, at least, are swept away.

We talk of the Gothic revival of the century, of its ultimate development, of the influence—the extraordinary influence—of Viollet-le-Duc, especially in his *Intervention de l'Etat dans l'enseignement des Beaux Arts*, and his *Dictionnaire Raisonné de l'Architecture Française*. Wonderful indeed was the enthusiasm these works aroused, and pernicious, possibly, was the pilfering they encouraged among men who lacked individuality and resource. French Gothic has been responsible for so much. As for Modern Architecture, Norman Shaw, speaking upon occasion to Mr. Batsford, said, "Ah, well, our Architecture is not so much a Style as a Fashion," and how true that is! We chat long, Bradley Batsford and I, for if any man in England knows Architectural works he does, upon the



tendencies of the young men of the day, how even good drawing is not always backed up by scholarly writing, of the inevitable repetition that is bound, more or less, to exist. A Scholar—he knows how often

and how easily it is possible to trace the work of the present day back to its source, but it is well to be reserved in these things.

Let me end with unwritten words of appreciation of the superb collection crowding the shelves at Batsfords', from roof to basement.

MR. FORBES, of the little North Tyne village of Birtley, is the possessor of a most interesting piece of workmanship, in the shape of an ordinary oblong kitchen table. It is entirely composed of old oak, and contains something like 3,000 separate pieces. There are contributions from almost all the Castles and Churches in Northumberland. A piece from the old Roman Bridge that once crossed the Tyne may be seen, whilst one or two stray chips come from Ireland.

BUILDING operations in connection with the proposed new Literary Institute, which is being erected at the bottom of Meeching Road, Newhaven, have been commenced.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
July 9th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

WITH regard to the restoration of the Collegiate Church of St Saviour, Southwark, the funds already contributed have been expended in re-building the Nave, incorporating therein every fragment of the ancient structure which came to light, restoring the Northern Transept, which was found to be in a perilously ruinous condition, building heating chambers, and providing warming apparatus, and in the partial restoration of the Lady Chapel and South Transept, which works are now in hand. The Committee has still about £3,000 in promises for these works, and this is sufficient, but the instalments on these are not due, and the available funds are absolutely exhausted. In addition to the sum named, about £5,000 is needed for the restoration of the Choir and Tower, and until this sum is forthcoming the restored Church cannot be opened. The exterior repairs are estimated to involve an expenditure of about £6,000. Now that the restoration of this ancient and historic Church, "next to Westminster Abbey, the finest mediæval building in London," is so near completion, it seems a pity that the works should cease for lack of funds.

A MANCHESTER correspondent criticises what may be described as the lay view of *The Daily Graphic* with regard to the introduction of glazed tiles in London house building. Our contemporary "was glad to see that this use of tiles was being followed by the use of glazed bricks, and hoped that this innovation will bring about the downfall of the abominable stucco and the accompanying nuisances that its frequent paintings invariably bring about. A variety of colours can be introduced into these glazed bricks, and an application of the hose of a fire engine once a year would keep them far cleaner and more wholesome than the application of several coats of paint once in seven years does to our stucco fronts." *Apropos* of this, our correspondent writes: "We had a building in Manchester which was covered with white glazed bricks, procured from the best manufacturers. These bricks in a town like ours become begrimed with soot and other atmospheric impurities, the heat of the sun cracks the surface and the rain drives in these impurities, and no amount of washing and cleaning can make the front even presentable. Surely the well-known expression 'A little knowledge is a dangerous thing' applies to the theory of *The Daily Graphic*?"

BUCTON CASTLE, recently visited by members of the Lancashire and Cheshire Antiquarian Society, was, said Mr. Andrew, supposed by some to be British. If it was British, he had no doubt it was also Roman. The Britons used neither mortar nor lead, and both had been found there. The position of Bucton was the most important part of the question. It was so placed as to dominate three Roman roads. One ran at the foot of the hill, one along the top of the opposite hill past Luzley, both of which were feeders to the grand artery road, the second Iter of Antonine, a road which ran through the Kingdom. Mr. Andrew had been on the same road at Gloucester. It is the

road that runs past Oldham Park, through Hey Chapel and Austerland, to Custleshaw and Cambodunum. This main trunk road was overlooked by two Watch Towers, one of which was Hartshead (an ancient beacon hill observable from the Derbyshire hills) which was probably worked by Roman soldiers from Bucton, which might contain a centurion's command. The other Watch Tower was probably at Strines Dale, perhaps near Woodward Hill, "strines" signifying Watch Tower. This was certainly only theory, but the three roads were three great facts, and the Roman legions must for centuries have tramped over them. Mr. Andrew called attention to the trenches at the foot of the hill. These he considered specimens of primæval agriculture. These trenches had been washed out by the rains of sixteen centuries, and at one time formed terraces up the side of the hill. He presented lithograph copies of similar terraces, called linches, in the open fields at Clothall, Herts. They were used for growing cereals by the ancient hillfolk. If he was right in his surmise, these terraces were quite as important in Archæology as the Castle on the top of the hill.

THE further portion of the restoration work at the ancient Priory Church of St. Bartholomew the Great, West Smithfield, finished under the superintendence of Mr. Aston Webb, consists of a very interesting little Crypt under the Lady Chapel. It is to be turned to a useful purpose as a Mortuary Chapel, where the inhabitants of the crowded parish may place the remains of their deceased friends prior to interment—no inconsiderable boon when the family dwelling-place is limited to one or two rooms. A good deal has been done also towards the restoration of the Lady Chapel itself, which for years was used as a fringe factory. The tracery has been re-inserted in the windows, and the building has been re-roofed, its full completion awaiting the advent of another £1,000. The Church itself is one of the oldest in London. It dates back to no less remote a period than 1123, when it was founded by Rahere, a member of the Chapter of St. Paul's, in consequence of a vision which he had of St. Bartholomew. After the Reformation the Church fell into bad repair.

THERE is much merit at the right moment in a glass of Bénédicte, and, therefore, we are pleased to see that at Fécamp, in Normandy, the new buildings for the manufacture of the liqueur have been inaugurated. It will be remembered that the old Distillery was destroyed by fire in January, 1892. The fire broke out in the early hours of the morning of January 12th, in an oil and colour shed, and spread with such rapidity that the whole building was soon enveloped in flames, but the Laboratory was saved. The Abbey itself, a building of historical associations and venerable antiquity, was, however, doomed. The loss entailed by the disaster exceeded the sum of £80,000. The new buildings, which occupy the site of the old Monastery, are in the Renaissance style, and in every respect reflect credit on the Architect.

MR. THOMAS CHATFIELD CLARKE, whose death we are sorry to have to record, had been in failing health for a year and a half, and during the last six months had suffered much. Mr. Clarke was born at Newport, I.W., in 1829, and established himself in London as an Architect and Surveyor in 1855. He soon took an influential position in his Profession and became surveyor to the Fishmongers' and Cordwainers' Companies, to the Trustees of Dr. Williams's Library, and to other public Institutions. He was well known as an expert in cases of compensation and those having to do with light and air. He was the Architect of the Bishopsgate School for Girls, the Royal Bank of Scotland in Bishopsgate Street, the new offices of "The Daily News" in Bouverie Street, the new School of the Mercers' Company in Barnard's Inn, and of various buildings in other parts of London. As a public man, Mr. Chatfield Clarke has lived a life of large and useful activity. He sat for Finsbury on the first and second School Boards for London, and took part in the settlement of the religious difficulty which is associated with the name of Mr. W. H. Smith. As a Liberal he contested

Poole in 1884, Hammersmith in 1885, and Grantham in 1892, but did not succeed in entering Parliament. In the Isle of Wight, where he had a country residence at Wooton, he was President of the Liberal Union, and was regarded as the leader of the Liberal party in the division. He took an active part for many years in the proceedings of the British and Foreign Unitarian Association, of which he was one of the Vice-Presidents. He was a Fellow of the Royal Institute of British Architects from 1862; and last year was President of the Surveyors' Institution, and delivered the inaugural address after the commencement of the painful internal malady of which he died. Mr. Clarke took a keen interest in many philanthropic and religious movements. He was a magistrate for the County of Hants and for his native town of Newport, and an active and useful member of the City Liberal Club, as well as of the Reform and National Liberal Clubs.

A FEATURE of the Industrial Exhibition to be held in Berlin is a separate Pavilion, covering about 1,200 square yards of ground, to be devoted to modern city improvements. Here will be shown the details of the management of educational, hospital, and benevolent institutions. An exhibit will also be made of sewerage, gas and water systems, as well as bridges, markets and public baths. These will be illustrated by models and drawings, as well as by original objects.

THE contractors for the new Organ at Bath Abbey, Messrs. Norman, Sons, and Beard, of Norwich, have practically taken possession of the building with a staff of fifteen skilled workmen, who are busily engaged in building the handsome and expensive instrument, which is more than usually complicated, and will occupy practically four positions in the Church. Two large wind chests are already placed between the huge piers supporting the Tower, on either side of the Central Aisle. On these have to be placed the sounding boards and certain metal pipes with ornamental fronts. To support these structures girders have been fixed into the piers. The wind chests, which now look uncommonly ugly, are to be encased in carved oak panelling. They are many feet above the seats underneath, and a clear view will be obtainable between the piers from the north to the south sides of the Church. The Pedal Organ will be in two sections in the North Transept, one portion against the west wall and another against the east wall; they will not project far into the Transept and the window will be practically clear. The Manual and Organist's Seat will be almost immediately behind the Pulpit. Large trunks are being laid in trenches right across the Church to convey the wind, as the Organ will be blown by a silent gas engine in a cellar outside the South Transept. About ten weeks is the time it is calculated will be occupied in the erection of the Organ, and Week-Day Service in the Abbey will be impossible until September. It is expected that the total expense will not fall far below £3,000.

PROFESSOR HERKOMER, R.A., has undertaken to adjudicate in the Arts Section of this year's Welsh National Eisteddfod. The competitions are numerous, and the Industrial Section also constitutes a striking proof of the growing tendency to associate the ancient Welsh Institution with the permanent national welfare of Wales.

WE are requested to state that the Science and Art Department has received from the Foreign Office a translation of a Note from the Austro-Hungarian Ambassador, which states that the Retrospective Exhibition to be held at Vienna, as already notified, from January to May, 1896, in commemoration of the Congress of 1814, will—besides portraits, autographs and personal mementoes—comprise illustrations of incidents or scenes connected with the event, examples of furniture, china, glass, tapestry, Embroidery, Linen and other clothes, and, generally, objects illustrative of the period of the Congress, or of the early years of the century, that is, from 1800 to 1820. Copies of the prospectus of the Exhibition may be obtained on application by letter addressed to the Secretary, Department of Science and Art London, S.W.

THE Peterborough Cathedral Restoration Committee is issuing an appeal for £12,000 to repair the damage done by the storm in March, to secure the safety of the West Front, and to complete the repair of the Transepts. Lord Lilford has given £500, and about £1,500 has been promised.

A CASKET, containing an autograph letter from the Ameer of Afghanistan, which was presented to her Majesty by the Shahzada, is a noteworthy example of the jeweller's art. It is described as being the largest and most valuable ever executed. The length is over 18 inches, the width 13½ inches, while the height exceeds 14½ inches. Octagonal oblong in form, it consists of solid 18-carat gold, lavishly embellished with diamonds, rubies, emeralds, and other precious stones, all of which take rank as specimens of brilliancy, purity of colour, and perfection of cutting. The main body of the Casket is divided into panels, composed of delicate tracery of an arabesque character, separated by pillars of lapis lazuli, the centre panel on both sides containing the arms of Afghanistan richly enamelled in heraldic colours. From the four half corners spring magnificent half stars, containing upwards of 178 fully-cut brilliants in each. The lid is slightly domed, and chased with devices emblematical of the flora of Afghanistan. Ascending from this are six pillars of lapis lazuli, with gold capitals of a Turkish character, surmounted by six Mohammedan crescents, each composed of twenty-four large brilliants, capped by turrets in gold. From the top of the temple thus formed are six chased and jewelled arches, crowned with the sixteen-point diamond star of Afghanistan, having a diameter of 4½ inches, and composed of 168 magnificent brilliants, weighing from one and a half to three carats each, the centre stone being valued at £1,500, measuring three-quarters of an inch across and weighing 17½ carats.

In view of the erection of new buildings for University College, Cardiff, a petition was sent some time ago to Sir William Harcourt, then Chancellor of the Exchequer, soliciting a Government grant. A reply has been received from the Treasury stating that the Lords Commissioners are prepared to accept the principle of a grant spread over a certain number of years, such grant in each year to equal the amount contributed from private sources, but not on the whole to exceed £20,000.

ELSTOW Church, which is inseparably connected with the memory of Bunyan's earlier days, is, states a contributor to "Cathedrals, Abbeys and Churches," itself a building of some size and considerable interest. Parallel with the wall of the Churchyard is the village green, and an ample tract of rough greensward, bordered by homely cottages. At its western end is the stump of an old stone Cross; towards its eastern a brick-and-timber building—the Market Hall in the days when Elstow enjoyed so much dignity. On the edge of the Churchyard are three broken trunks of great elm trees, still putting forth tufts of branches. All these must have existed when Bunyan was a lad. Many a time he must have loitered about the Market Place; he may, perchance, have seen that Cross broken down, if it had escaped the earlier reformers; he may have scrambled up those elms, defiant of the beadle, for they would be young trees in his boyhood. Little doubt this green by the Churchyard wall was the place where he was playing his game of tip-cat on that Sunday afternoon when the call to repentance sounded in his ears, and that life began which he has narrated in his great allegory.

MR. HAMO THORNYCROFT, the distinguished Academician, who has helped to fill the Sculpture Room of Burlington House this year, is a sculptor by birth as well as by training. Both his father and mother belonged to that profession. He himself was born 45 years ago in London, and was educated at Macclesfield, and at University College School, London, before passing on to the Academy School, where he carried off medals and prizes. His first contribution to the Academy was made in 1871. Among his most striking works are a nude statue, "Teucer," bought by the Chantrey Fund Committee, "The Sonata of Beethoven," "Medea," and "The Mirror" (1890), his diploma work.

STANDING in the centre of an open field at Hoxne, near Eye, in Suffolk, there is an Obelisk erected to the memory of King Edmund, who

No part of this anathema is now visible, but the tradition is so well known that a bridal party will take a circuitous route rather than pass over the Bridge.

IN the town of Wallsend, Northumberland, an interesting discovery in the form of the remains of long-hidden buildings of a massive character has been made. The locale of the newly-discovered ruins is within the walls of what, in former times, were the gardens and private grounds in connection with Buddle Hall, in which Mr. Buddle, the celebrated mining engineer of that name, lived and died. Within the grounds, and some 50 yards from the northern entrance, there was a green mound, some 20 feet in height and 300 feet in circumference, which being surmounted with the model of a cannon, pointing towards the gate,

imparted a military aspect to the surroundings. After the death of Mr. Buddle, the late Mr. Andrew Leslie, shipbuilder, rented the Hall and grounds for a number of years, but, on his removal to Coxlodge Hall, the old Hall at Wallsend was let in tenements, and the gardens and grounds fell into ruins. It was not, however, until the estate changed hands, a few months ago, and a series of new streets were planned, that arrangements were made for the removal of the mound to make way for the new erections, with the result that, only a few feet under the surface, the workmen uncovered a massive wall running from north to south, and composed of huge blocks of free stone, laid in regular layers, and rising to the height of some seven feet above the level of the ground. Excavating on the other side of the mound, the workmen have also laid bare what appears to be a continuation of the wall, which at this point is upwards of four feet in thickness, and intersected by an opening, slightly vaulted. At the south side of this archway, which is less than three feet in width, an iron bolt projects from a block of freestone. The wall is supposed to be either Roman or connected with the buildings of the original Wallsend Colliery. The Roman Wall was commenced by the Roman Emperor, Ælius Hadrianus, in the year 120, with the view of strengthening the chain of forts erected by Agricola, about the year A.D. 80, from the Solway Firth to the mouth of the Tyne, as a barrier to the incursions of the Scots and other fierce northern tribes, and it was completed in 207-8, by the Emperor Severus. This vast military barrier extended from Wallsend, through Newcastle, and terminated near the Irish Sea. There were 18 military stations on the Wall. Newcastle got its name of Pons Ælii from the Bridge across the Tyne built by Ælius Hadrian. In 449, it was still known as Pons Ælii; and about that

time the inhabitants of the North of England asked and received the assistance of the Scots and Picts, whom the Romans had failed to subdue, to aid them in driving out the invaders, and in 547, they invited the Saxons to aid them in driving their old allies out of the country to the north of the river Tyne.

A HOUSE in Piccadilly is an expensive luxury. Many people wonder what is the market value of one. Here is a case in point. The *Estates Gazette* says that "the finely-situated town house, No. 146, Piccadilly, adjoining the residence of Lord Rothschild and Apsley House, has just been sold by Messrs. Grogan and Boyd. The price has not transpired, but we believe it is about £50,000. The house has a very fine garden, extending back to the park." Mr. C. D. Rose was the late owner.



met his death at the hands of the Danes in 870. On the site of the Monument stood an oak-tree, in the branches of which the king sought refuge from his foes. At nightfall he emerged from his leafy hiding place and secreted himself under the Bridge which spanned a stream called the "Goldbrook." A wedding party, however, passing over the Bridge in the evening, observed the king's gold spurs glittering in the moonlight, and in this way his retreat became known to his enemies. He was taken back to the tree in which he had previously hidden himself, and shot with arrows, and his body was afterwards removed to Bury St. Edmunds and interred in the Monastery there. On Goldbrook Bridge is inscribed a record of the event. Local tradition has it that many years ago the existing inscription was followed by the words, "Cursed be the wedding party that passes this Bridge."

THE Collection of Japanese works of Art belonging to Sir Trevor Lawrence, Bart., Fellow of the Japan Society of London, was formed between the years 1869 and 1894. The earlier part of that era was the great period for collectors. Japan had its unrivalled Art treasures almost intact, and it was still in the infancy of its present too well developed attempt to imitate and degrade them for exportation. We all know how the whole country has changed in the last thirty years or so in commerce, war, and political organization. But only the few are aware how much it has also changed in Art. One of the richest parts of the Collection is that containing netsukés, okiminos, and statuettes. The statuettes are properly classed with the others, because most of these are only statuettes meant to serve a use. The use is of the slightest. The netsuké is a button fixed by a cord to any small article, such as a pipe case or tobacco pouch, to prevent it from slipping through the wearer's girdle. Such things with us would be buttons and nothing more, set off with perhaps a little meaningless ornament. In Japan they are carvings in ivory, wood, or similar substances, as exquisite in their way as any work on the Greek gems. The taste, the fancy, the humour of the people—the last especially—all are here. The pipes, the tobacco pouches, the pipe-cases, the inkstands, the brush-cases, exhibit the same wonderful variety of illustration of the national life. The lacquer work, in which the Japanese easily surpass all other nations, is particularly well illustrated in the Collection. Hanging pictures, embroideries, and miscellaneous things in wood, ivory, and other materials form another division, and after them come the ceramics. Nothing these wonderful people may do in the future can ever quite equal, as a contribution to the World's treasures of mind and taste, what it has done in the past.

In connection with the Church of St. Raphael, where the marriage of the Duc of Aosta and Princess Hélène took place, there is a story not generally known. It was built (says the *Saturday Review*) with the moneys of a converted Jew named Raphael. Just after the building was completed, Raphael had a dream that he would die within a week after the consecration of the place of worship. As a matter of course he endeavoured to delay the consecration by fair and unfair means, until a priest, with the help of a licensed victualler from the neighbourhood, who procured a bottle of *absolutely pure* wine, consecrated the edifice. Then he told Raphael, who took to his bed and died three days afterwards.

A SINGULAR ceremony has taken place at Neuilly-sur-Seine, in the course of which a reliquary was handed to Count Urbain de Maille, representing the Duc de Madrid, by M. Edouard Drumont, in the presence of a group of Legitimist notabilities and a notary. This reliquary consisted of a crystal oviform vase, opening in the middle, and surmounted by a fleur-de-lis in copper-gilt. In it was suspended a dried human heart, and at the bottom of the vessel were some pieces of broken crystal. The heart, if certain documents and traditions are to be accepted, was that of Louis XVII., and the proceedings opened with the reading of an autograph letter from Don Carlos, in which the writer thanked M. Drumont for the homage which he had paid to this precious relic of the Royal martyr, which he, the Prince, accepted in order that it might be deposited in the Chapel of the Castle of Frohsdorf. As in such a matter everything depends upon the genuineness of the relic, the solemn declaration of the donor was regarded as a pious proof of its Royal origin. He affirmed, raising his hand as Frenchmen do in a Court of Law, that the heart was certainly the one which he had inherited from his mother, and that it came into her possession from the hands of M. Gabriel Pelletan, who in his turn had treasured it for fifty-three years, he having rediscovered it at the Archbishopric, and recognised it as the one which his father had entrusted to Monsignor de Quelen. Dr. Pelletan had, it appeared from documentary evidence, made so bold as to abstract the heart of the young King when he conducted a post-mortem examination of his body upon his death in the Tour du Temple, by order of the Comité de Sûreté Générale. The doctor pre-

served the heart as an object of adoration and veneration, and on the return of the Bourbons endeavoured to restore it to Royal keeping. Circumstances, however, were against him; but immediately before his death, in 1828, he supplicated by letter the Monsignor de Quelen, then Archbishop of Paris, to receive the treasure, in order that it might be handed to the Royal family. The Archbishop accepted the sacred trust and gave a receipt for the heart. Then came the Revolution of 1830, and with it the sack of the Palace. The vase was broken in the Courtyard, by one Lescroart, who was ignorant of its value, and he carried away merely the papers which were found with the vessel, but subsequently by his aid M. Gabriel Pelletan recovered the fragments of the shattered vase, which still bore the number seventeen and the stars mentioned in the receipt which had been given by the Archbishop. Further search revealed in a heap of sand the Royal heart.

STANDING on one of the highest points in Sussex, 600 feet above sea level, the new Church of St. Leonard, Turner's Hill, commands a magnificent panorama of Sussex and Surrey scenery. The style is founded upon that of the 14th century, and local stone from the Selsfield Quarries has been very extensively used in its construction, the fine quality and colour of this stone adding some distinction to the building. At some future date it is intended to complete it by adding a Western Tower and Porches, and to introduce a West Window. The Church at present consists of a Nave with Clerestory and side Aisles, and a Chancel with Aisles of which that to the north is gabled and intended for an Organ Chamber. Space is provided for about 400 persons. The Architect was Mr. Lacy W. Ridge, F.R.I.B.A., of 5, Verulam Buildings, Gray's Inn.

THE Bolsover Colliery Company has decided to build a Model Village at Creswell on similar lines to the one at Bolsover. There will be between three and four hundred houses, Co-operative Stores, a Reading Room and Institute, and a Dissenting place of worship. The Village will be built on land situated between the Midland and East to West Railway.

OLD English mezzotints and coloured engravings seem to be in great favour with collectors, judging by the prices secured at an auction sale held by Messrs. Phillips, Son & Neale. The catalogue included 134 lots, which realised an aggregate of nearly £1,200. Amongst the best prices realised was £40 for a portrait of Mrs. Hardinge; "A Nest of Cupids," by Schravonetti, after Miss Aspinall, £41; "Maternal Love," by Tomkins, after Russell, £37; "Mrs. Q. W. Blake," after Huet Villiers, £33; a pair of opals—Lady playing harp and a lady contemplating a miniature, £30; "Mrs. Mills," by J. R. Smith, after Englehart, £41; "Georgina, Duchess of Devonshire," by Tomkins, after Downham, proof, £40. A small painting by G. Morland, with engraving, fetched 66 guineas.

ERECTED at Dalry by the Corporation of the City of Edinburgh, the new Baths have all but reached completion, and will, it is expected, be opened in the course of a week or two. Situated on a site in Caledonian Crescent, in its general aspect the interior of the new building is very similar to that in Infirmary Street, but a number of improvements have been introduced which go to place the new building ahead of the old in respect to general completeness. The building itself is a brick one, with a handsome stone Front to Caledonian Crescent. A prominent feature here is the Entrance Hall, laid with tiles, and well lighted from all sides. One matter which has been aimed at in the construction of the building has been the provision of sufficient light and air, and, in both respects, this object has been attained, the interior of the building having a light airy appearance, while absolute cleanliness is ensured from the fact that, owing to the construction of the building, there being no basement flat, the hose can be turned on to any portion of it. Most of the pipes used, it should also be stated, are of iron, as being less subject to expansion and contraction than lead. The estimated cost of the building, exclusive of site and furnishing, is about £9,000.

A CHICAGO Architect, Mr. J. Sidney Villere, has received from the brothers De Reszké, the famous Opera Singers, a commission to build them a princely Lodge at their country seat in Poland. Every part of the structure is to be completed in Chicago and sent to Poland in sections. This is believed to be the first instance in which Western ideas of Architecture and comfort have been adopted by any foreigner of artistic tastes.

WHEN Huxley was a small boy his great ambition was to be a parson. Some years after his ambition was to be a working engineer. He has said that he often wished to be what the Fates were dead against. For example, both he and his great friend, Mr. Tyndall, were at one and the same time candidates for Professorships in Toronto University, and, as the Americans would say, they were both "licked." At an earlier stage in his career some of his friends thought he might probably spend his days as a Navy surgeon, for, like his illustrious master Darwin, he served on board a British man-o'-war; and like him, too, he collected great heaps of Natural History facts from the remote seas and lands which he visited. On the North Australian coast the Fates were taking good care of young "Sawbones," coaching him up to become one of the most distinguished anatomists and physiologists of the century.

IMPORTANT alterations have been made at the Manors Railway Station, Newcastle, in connection with the doubling of the lines, and increased traffic is noticeable at Elswick and Heaton. Time was when Newcastle had but one Railway Station; now it has six—the Central, the Manors, Heaton, Elswick, New Bridge Street, and Jesmond, with almost the certainty of a seventh, at West Jesmond, at no very remote date. The first Station was the house standing near All Saints' Schools at the Manors, and was used in connection with the North Shields and Newcastle Railway opened in 1839. The second Station was a stone house that is yet standing in Railway Street, Scotswood Road, and the third was a long wooden erection situate at the upper end of the Forth—at no great distance from the Infirmary. The latter was succeeded by the Central Station. There is no need to refer to the history of the other Newcastle Stations. All that need be said is that they are the product of the rapid increase of the City.

THE new Free Library for Hammersmith is to be built in the style of the English Renaissance, the walls being of red brick, with stone mullioned windows and cornices. A reference to the drawings shows that simplicity of arrangement has been aimed at, the leading idea of the Architect (Mr. Maurice B. Adams, F.R.I.B.A., of Chiswick) being complete supervision through all the public departments at a glance from the issue counter in the Central Hall. This is so placed that the entrances to all the rooms are in immediate view of the officials in charge of the issue counter, while the glazed screens will enable them to see all that is going on without leaving their posts.

AFTER much procrastination, an energetic effort is being made to completely restore the old and historic Church of Saint Eustache, near the Central Markets, in Paris. A report has been drawn up on the subject by M. Lamouroux, who points out that the restoration is absolutely necessary. The patching which has been carried on intermittently for some years is utterly useless, and the Church remains a peril to the public. Last year, for instance, the foundations were discovered to be in a dangerously disastrous condition. It is estimated that over £28,000 will be required for the work of restoration. Most of this money will be advanced by the City, and the Government will also furnish some funds. Saint Eustache was finished in 1642, and is a curious mixture of the Gothic and the Renaissance styles, like the old Hotel de Ville. It contains the tombs of Colbert, the Minister of Louis Quatorze, and the poet Benserade. The work of restoration will require at least six years, according to M. Lamouroux, who strongly insists on the necessity of preserving an edifice which is a national monument.

The great wheel has revolved on its own axle at last. It has taken a long time to complete, but an undertaking of this kind cannot be hurried; and England can now boast of having beaten the Yankee in the matter of big things, by having the biggest wheel on record. The Ferris Wheel at Earl's Court is considerably larger than that which was one of the features of the Chicago Exhibition, and it is quite an undertaking—a twenty minutes' revolution, we believe—to go round it. As a vantage point from which to see London, with its maze of streets and housetops, it quite puts St. Paul's in the shade.

WHAT may be regarded as the chief work in which the Clyde Trustees have been engaged for the past twelvemonths is an extensive hydraulic installation. The hydraulic system of cargo cranes was adopted by the Trustees after they had received tenders for both hydraulic and electric cranes from specifications prepared by Messrs. Deas and Baxter. The designing of the buildings for the hydraulic installation was entrusted to Messrs. Burnett, Son, and Campbell, Glasgow. The Engine House measures 131 feet by 22 feet. While avoiding undue ornamentation, the Architects have endeavoured, by an effective disposition of the Accumulator Tower and Smoke Stalk, and by emphasising the necessary horizontal lines of the Boiler Shed and Engine House, to give dignity and style to the structure, and by its incorporation with the gateway and building to render it essentially a portion of the Dock. The contractors for the work were Messrs. John Paterson and Son, Limited, Glasgow.

DR. HENRY D. LITTLEJOHN, of Edinburgh, who has just received the honour of knighthood, has a wide reputation as an authority in matters of public health and medical jurisprudence. For years he has been officer of public health for the city of Edinburgh, and in a wider capacity he has come before the public as officer of health to the Board of Supervision in Scotland. The British Institute of Public Health, when holding its annual Sanitary Congress in Edinburgh a few years ago, elected Dr. Littlejohn to the presidential chair, and the University of Edinburgh at the same time conferred upon him the honorary degree of LL.D. We congratulate Dr. Littlejohn upon this timely recognition of his services in Sanitary matters, holding as we do that Governments too often pass the skilled Specialist by for the tub-thumping politician or the large-pursed partisan.

ST. GEORGE'S, Hanover Square, is wealthy enough to do things handsomely in the matter of Free Public Libraries and Reading Rooms provided out of the rates. This is made manifest in the case of the new Library in Chapel Place North, South Audley Street, which is a terra-cotta building, adjoining some public gardens, where the leafy trees give a pleasant view from the windows. There is a spacious Reading Room and Lending and Reference Libraries. All the fittings, desks, tables and bookshelves are of oak. The building itself has cost over £6,000, exclusive of furniture and equipment, and the site has been obtained from the Duke of Westminster at a nominal rent. A noteworthy feature is a Children's Lending Library for young people between ten and fourteen years of age.

THE official career of Mr. A. C. King, the head of the Educational Library at the South Kensington Museum, and senior keeper of that Institution, has been brought to a close by his retirement under the age limit regulation. The vacancy thus occasioned makes the third important post under the Science and Art Department which will be at the disposal of the

new Vice-President of the Council, the other two vacancies being the Directorship of the Dublin Museum and the Curatorship of the Bethnal Green Museum. One of the last official acts of Mr. Acland was the sanction of the purchase of the large and valuable Collection of Woodwork of the Mediæval and Renaissance periods at the Peyer sale in Paris.

LORD TENNYSON was not a sailor, and not even an amateur yachtsman, although he could write about the sea and seamen with charming, and on occasions, with powerful effect. The proposed Tennyson Beacon, to be erected on Highdown, Freshwater, is, nevertheless, quite appropriate. The site of the Beacon forms part of the Manor of Farringford, Tennyson's celebrated home; and the spot was a favourite of his. Mr. Pearson, R.A., has designed the tall Iona Cross, 32 feet high with the pedestal, which, when put up, is to form a Beacon for mariners; and the Trinity House and Board of Trade have agreed to accept it as national

To the memory of the late Emperor of Germany a Memorial Church is now being built in Berlin, and the designs for the stained glass windows, which are to be contributed by the Empress Frederick, the Freemasons of Germany, Count von Moltke, and sundry officers of the Emperor's bodyguard, were thrown open to competition. Several German and French firms, as well as English ones, entered the lists, and the designs of Messrs. Campbell, Smith & Co., of Newman Street, Oxford Street, were accepted as being the best. They have chosen as their subject for the large Choir Window, the gift of the Empress Frederick, three over life-size figures of Our Lord, St. Paul and St. Peter, with attributes introduced into the borders surrounding them.

It is suggested that, after the present year, instead of the award of one Art Scholarship annually, tenable for three years to the School of Art, Liverpool, together with a grant of £50 per annum for maintenance, there should be awarded (a) two Scholarships annually, one giving free admission to the School of Art and another to the Day Classes of the School of Applied Arts, with a grant in each case of £30 per annum, tenable for two years; (b) one Scholarship annually, open to students of either of the above Schools of not less than two years standing of the value of £60, and tenable for one year at an approved Art School or under an approved teacher in London, Paris, or other place approved by the Technical Instruction Sub-Committee.

At the recent Exhibition of the Home Arts and Industries Association, which has just closed, the Della Robbia Pottery showed a very important exhibit, having a stall some 30ft. in length allotted for their wares, filled with a most interesting variety of the home and cottage industries, including wood carving, iron work, embroidery, inlaying, spinning and hand-woven goods, baskets, leather stamping, and brass work. Some 400 pieces had been transported from the modest little workshops at Birkenhead. Most of these, with the exception of some few patterns which had to be reserved to execute orders from, found purchasers, and no little admiration was expressed at the remarkable development and improvement which was manifested since the previous year's exhibit.

THE Bill for the Improvement of Dunoon Pier has passed through the Committee of the House of Commons. The Police Commissioners have for a number of years been in negotiation with the present owners of the existing Pier, and an agreement to purchase has been arrived at. The purchase price is £27,000, and, in the opinion of the Commissioners, is a reasonable bargain. The net revenue from the Pier and other property purchased is £2,500 a year, and all that is required to pay interest and to provide sinking fund on the sum borrowed is £1,600 a year. The Commissioners propose to give accommodation at the Pier to the extent of 440 feet in length, and this will allow three large Clyde steamers to come alongside at the same time. At present the Pier could only accommodate one. The difficulties of coming in and clearing out are very great, and sometimes as many as four steamers were waiting outside to come in. The Commissioners have come to an arrangement with the steamboat owners exempting them from dues for ten years, and no doubt after that period the dues from that source will be an additional and valuable security. The £40,000 to be borrowed is considered ample for the new works and for the purchase.

A NEW building is to be erected for the accommodation of the members of the Essex County Council.



A SKETCH BY F. T. W. GOLDSMITH.

property and to keep it in good repair. The only little difficulty that remains is the cost. The price of the Beacon is £1,000, of which £750 has been subscribed. There is no fear, however, of the remainder not being raised with ease.

THE plans for a Tower, to be erected on a commanding position on the heights above the town of Oban, on a spot known as Battery Hill, have been prepared. The Tower, which will rise to a height of 100 feet, will be 250 feet above sea level. The design is in the old English style, pierced with twelve ornamental Gothic windows. It will contain an internal spiral staircase, with platforms at intervals, from which magnificent views of the bay, the sea, and neighbouring islands will be obtained. At some future time it is intended to build in connection with the Tower a Choir Chapel, a Museum, and a Gallery of Art. These buildings are to be reached from the Tower by ground arches. The Tower itself is to cost between £5,000 and £6,000.

"GAINSBOROUGHS" AS AN INVESTMENT.

THE picture buyer, who haunts Christie's with a cheque-book, will be staggered by an article in the *Speaker* called "The Commercial Connoisseur." This pours odium on the speculators who give ten thousand pounds for a Gainsborough simply as an investment. "It is the genius of Capel Court that presides at Christie's, and directs the beat of the auctioneer's hammer. It is not the favourite Artist who is knocked down to the highest bidder, not the delicate quality of his style, not the exquisite pleasure that is yielded by his brush. It is his value as an investment. He is a competitor not with the great painters of his age and school, but with Brighton A's and the mysterious railways of the American continent. . . . Ten thousand is given for a Gainsborough because the investor thinks this is a prudent appropriation of his money. He has a strong faith in the stability of Gainsborough stock, just as old ladies believed in Consols. Consols were never beautiful; they did not make a rainbow of imagination in this vale of tears; but they inspired a sense of comfort and security. So the owner of the Gainsborough, when he hangs it on his wall, will think of it, not as a lovely picture, but as his ten thousand pounder—a thing of canvas, paint, and frame in which he has sunk a fortune." There is a good deal more to the same effect, and unless we are much mistaken, the picture investor will be displeased. His reply would probably run something like this: "Why on earth should I be assumed to care nothing for a valuable picture which I purchase at a very high figure? The nation gave seventy thousand for an Old Master out of the Blenheim Collection. That was done in order that a monumental work of its kind might become national property. This was not a speculation on the part of the Treasury; it was a judicious investment, governed by a genuinely artistic motive. Why am I more of a huckster than the nation? I have a real pleasure in the possession of a costly painting. I do not gloat over it solely with the idea that it represents so many thousands. Some wealthy men buy diamonds for their wives, because diamonds are always so much capital, but that does not prevent them from appreciating the effect of the gems round a woman's neck." On this it might be remarked that diamonds are products of Nature rather than Art, and that there is no comparison between their barbaric splendour and the subtle genius of a noble picture. Money invested in diamonds is, so to speak, in its natural element. It is earth to earth and dross to dross. Still, there is something to be said for the connoisseur who has the double satisfaction of genuine pride in an artistic possession and the knowledge that the money he gave for it is always safe. But is it always safe?



MEN WHO BUILD.

No. 20.

MR. JOHN FRANCIS BENTLEY.

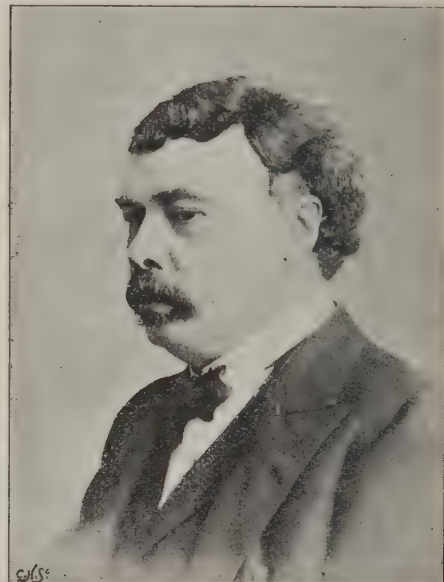


THE truth must be told though the heavens fall. It was the Cardinal Archbishop himself who begged John Francis Bentley to come out of his shell, that by stepping into the sunshine of his reputation, instead of basking in the shadows of his Art, he might aid in pronouncing the welcome of the new Catholic Cathedral of Westminster, and by such indirect means help to swell the funds necessary for the completion of so ambitious a scheme.

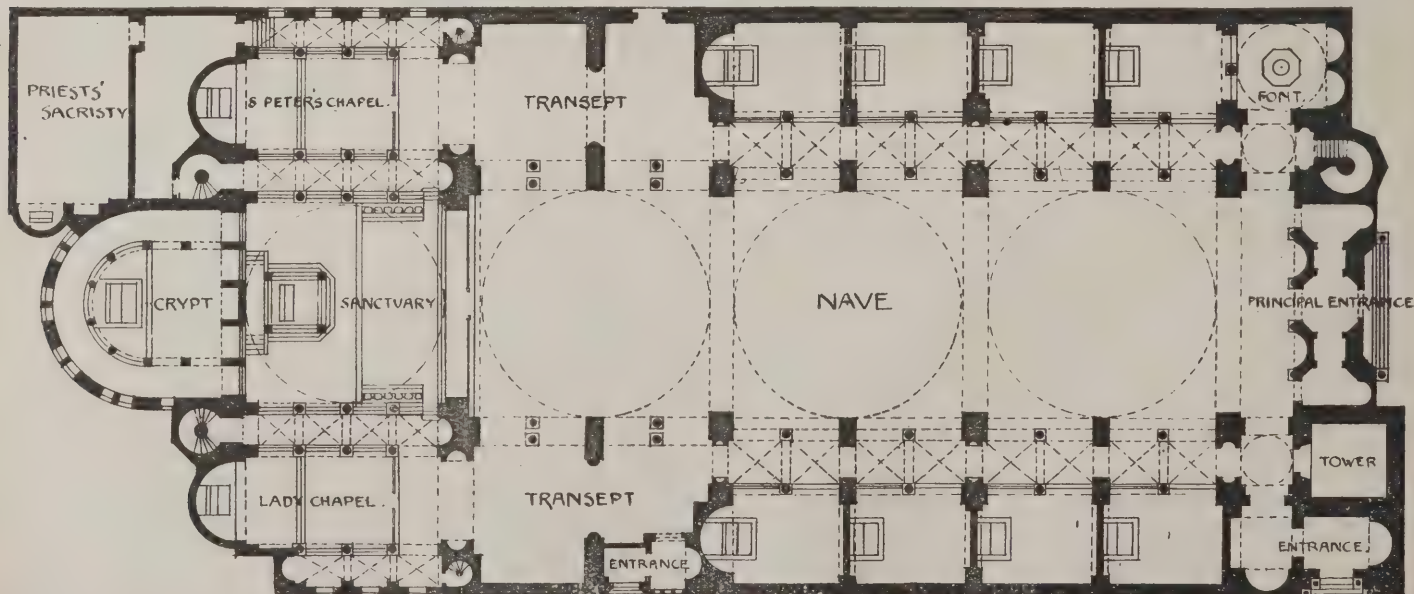
John Francis Bentley belongs to a small coterie of Architects of whom the World—in the common sense—knows nothing and sees less, and of whom the vast majority of their professional brethren never hear of. He was articled in the middle fifties to Henry Clutton, who himself prepared complete drawings for the Cathedral in the French Gothic style, close upon thirty years ago—some period before he became totally blind and relinquished practice. Although Henry Clutton was a man of great Architectural skill and worked in many instances in conjunction with Burgess, Mr. Bentley never took kindly to office routine, but registered a vow that he would never enter another Architect's office, although he lingered on with Mr. Clutton for some two years after his articles had expired. It was during this time that a little episode occurred which throws a very happy light upon International Competitions of five and thirty years ago. Clutton and Burgess prepared an elaborate set of drawings for Lisle Cathedral, and Burgess, who was always a very shrewd and clever man of business, had all the sheets lettered up in French. The reports and detailed estimates of the works, which were very voluminous, were translated and almost rewritten by Frenchmen, and when the whole thing was complete, young Bentley was deputed to take the drawings to Paris and despatch

them from there to their destination. The shrewdness of Burgess was justified, for the judges, strong in their conviction that the Englishman's drawings were the work of Viollet-le-Duc, awarded them the premium and any amount of praise. When, however, the mistake was discovered, our French friends found a way out of their trouble, and, as history knows, Messrs. Clutton and Burgess did not build the Cathedral at Lisle.

When Mr. Bentley threw off the yoke of his probationary period, he started to study the works of Europe, and we hardly know whether for the last thirty years he has taken greater pains in hiding himself in Venice, in Ravenna, and in Rome, or in retiring to his rooms in the Adelphi, where he might shut himself away from all contemporary work, and create just what his soul dictated. You yourself do not know many



of the fine things John Bentley has done, but if you had never seen anything beyond the interior of Carlton Towers—the joiners' work alone of which cost over £30,000, it would have sufficed to determine the capability of its Architect. If you mistake not, Corpus Christi, at Brixton Rise, is another of Mr. Bentley's Churches, and when completed will be the largest Gothic Church in London. For many years he was a Goth pure and simple, more English in his methods than his old master, and than even Burgess, but the Eastern Churches have always impressed him by their magnificence of colour, and



PLAN OF THE CATHEDRAL AT WESTMINSTER: T. F. BENTLEY, ARCHITECT.

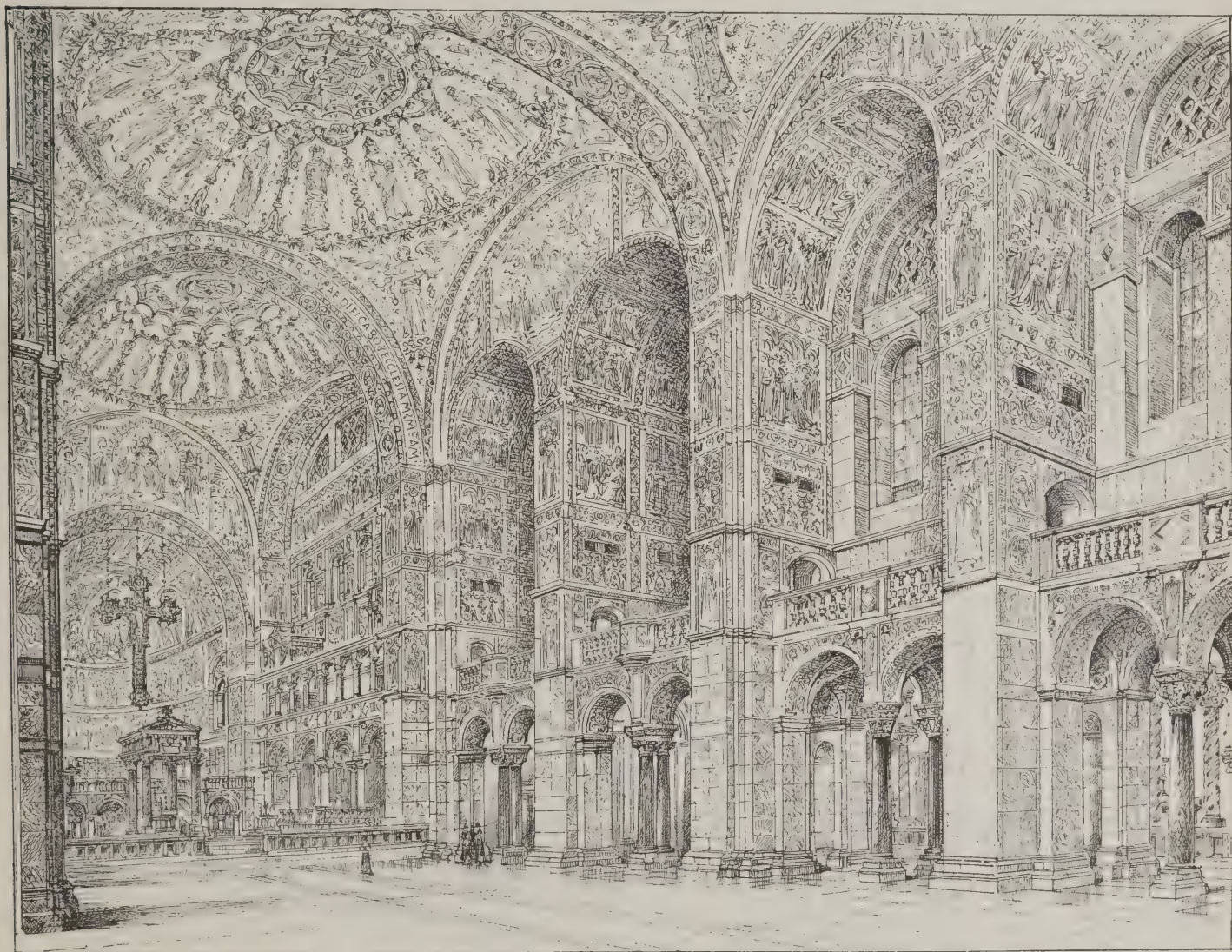
thirty years of ardent study have made him one of England's great colour masters.

At a time when Continental Italy was in so distracted and deplorable a condition as scarcely to have the spirit, or the power, to undertake any work of magnitude, Venice, apart from the scene of strife and already enriched by commercial enterprise, began a second Cathedral in honour of St. Mark. Their previous building having been destroyed by fire, the Venetians determined to take S'anto Sophia—which they considered the most splendid Church in the World—for their model, and accordingly sent for the best Greek Architects, who thus brought the Byzantine style into Italy for the second time. Every vessel that cleared out of Venice for the East was obliged to bring back a certain amount of marble for the

Russia. For weeks at a stretch Mr. Bentley has studied this particular Church, in face of Ruskin's assertion that it has neither grace nor elegance, but a sort of barbaric magnificence formed on the plan of the Greek Byzantine Churches, and, like them, adorned with clumsy mosaics. San Vitale at Ravenna is another of John Bentley's favourite studies, principally for its close affinity in planning to St. Sophia's and its wonderful mosaic work, all of which has obtained the admiration of successive ages. These with, of course, Santo Sophia itself, and several other of the Early Christian Churches in Dalmatia and Greece, have provided the inspiration for the new Cathedral of Westminster, the Foundation Stone of which Cardinal Vaughan laid a few days since. The construction of the Church will be proceeded with exactly

invariably fixed in wrong positions, and I have seen really good interiors gradually "waste" away and the mouldings and arches go for nothing, under the influence of stained glass ignorantly disposed.

Mr. Bentley does not believe in the manufacture of pretty drawings, and for thirty years has had no cause to make one. Within the shell of his own convictions, out of which he has stepped, in this instance, for the benefit of others, there is the atmosphere of refinement, of truth and fidelity to the canons of Architectural Art; and if that truth and fidelity prompt him—in his work—to begin just at that point where the ordinary Architect leaves off, it is because he knows that ordinary work is invariably bad, and extraordinary work ten times worse.



SKETCH OF THE NAVE OF THE CATHEDRAL: J. F. BENTLEY, ARCHITECT.

Cathedral, which took nearly a century to complete. In 1071, Doge Domenicho Silvio, by the aid of Greek Artists, began to decorate the interior with marble and mosaic until the whole fabric was encrusted, and so completely was St. Mark's of foreign extraction that it produced for centuries no effect whatever upon the Ecclesiastical Architecture of other parts of Italy, for the external appearance of the Cathedral is no less Byzantine than its interior. From the number of its cupolas St. Mark's has often been said to savour of a Mosque; whereas the truth is that the Mahomedan House of Prayer was copied from the Christian, and not the Christian from the Mahomedan. Both the Turkish Mosques and St. Mark's are descended from St. Sophia, which is equally the parent of the Churches of

after the method of the Ninth Century. The whole fabric will be erected in ordinary London stock bricks, which will eventually be entirely encased with the richest marbles and mosaics, as funds allow. The mosaic decoration of the Nave will portray the history of the Catholic Church in England from the coming of Augustine to the present time. The Transepts and the Sanctuary will contain the history of the Mother Church, and the twelve Chapels will follow their respective dedications. Not a square inch of stained glass work will appear in the whole Cathedral, the Architect requiring a "pure white light" to enhance the value of his interior. I should like to be commissioned, he says, to destroy five-sixths of the stained glass in English Churches. Beyond the vileness of its design and colouring, it is

CALLINGTON Church Bells, which have been in bad condition for many years, are to be restored by Mr Aggett, of Chagford, who has contracted to complete the work by the harvest festival.

THE Minister of Public Works, Rome, states that the Italian Government has always been perfectly ready to listen to the proposals of Switzerland for the construction of a Simplon Tunnel, and that the Italian Government looks very favourably upon the enterprise.

As an indication of the interest now taken in Natural History, over 100,000 persons have passed through Mr. Rowland Ward's jungle at the Empire of India Exhibition since the opening day.

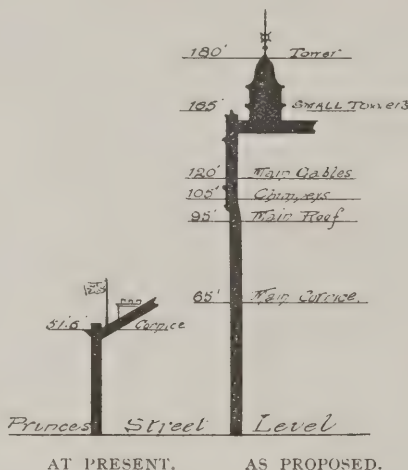
The Stourbridge County Court is to be considerably extended, so as to provide a second Court for the Registrar. The second Court will be on the upper floor, and the work will shortly be put in hand.

"THE DESTRUCTION OF EDINBURGH."

A CHAT WITH THE MARQUIS OF TWEEDDALE.

IT was good of the Marquis of Tweeddale, being the Chairman of the North British Railway Company which contemplates erecting the monster Hotel in Princes Street, to meet us in our Crusade against "The Destruction of Edinburgh," and if suavity of manner be calculated to turn away opposition, then the opposition we feel it our duty to make to this monstrous scheme would be ended. But there is hope for us. Not that we think it at all possible, or even probable, that the forces we are bringing to bear upon the authorities will have any happier result than that of reducing the proposed height of the erection, and thus bringing it more into scale with the surroundings. Lord Tweeddale was accompanied at our interview by the Marchioness, who, as many people know, is about the only woman in the peerage who has more than once taken up an official position on the foot-plate of a railway engine and successfully driven an express train. We commenced our onslaught upon his Lordship by fearlessly asserting that Railway Directors had no souls, and the Marchioness as fearlessly agreed with us, but when we came to closer quarters, the Chairman stuck to his last, and insinuated that his Company would like, if we had no objection, to obtain a little interest on the capital sum, over £200,000, we believe, to be expended on the suggested building. It is thought that the loss of two floors—two floors of bedrooms—would be a very serious reduction of income, especially as first-class Hotel accommodation is almost an unknown luxury in Edinburgh. It was our counter suggestion that the new offices of the Company need not be incorporated in the Hotel building, which could then be reduced in size; but there is the cost of administration in two separate buildings to be considered, which, in our belief, is not an insuperable difficulty. After discussing many other

anxious to express them over a *nom-de-plume*. We detest such weakness, and only under very exceptional circumstances shall such communications be considered, although correspondents who do not accept the responsibility of their own convictions, need never fear that the BUILDERS' JOURNAL will betray their confidence. Amongst all the letters we have yet received upon this Edinburgh matter, there are no less than eleven written over fictitious signatures, five of which are from men who mirror our own convictions, and whose positions could



well have supported the dignity of their own names.

MORE CONVINCING SKETCHES.

We publish in this issue a sketch taken from Princes Street, with Mr. Beattie's building blocked in to actual scale. This will show, even more strikingly than did the competitive perspective which appeared in our last issue, what the purpose of the Railway Company really is. We also insert a sectional sketch of the late existing building and the proposed building, with the heights of the various features plainly marked thereon. Then

communicate with him. We will try again.

It should be stated that all the sketches which are published this week were prepared under the direction of Lord Wemyss, and are those referred to in his letter which concurrently appeared in the *Edinburgh Evening News*.

RESTORING A WELSH CHURCH.

THE interesting Church of St. Michael, Michaelston-y-Vedw, near Cardiff, supposed to be the Church of St. Michael built by St. Medw, one of the missionaries sent by Rome to South Wales in the first century, is being carefully restored by Messrs. Seddon & Carter, of Cardiff. The walls of the present Church are thirteenth century, but there are fragments remaining of pre-Norman work that might be part of the original Church of Medw. These, however, have suffered greatly, as have also the thirteenth century stonework details, by a fire which must have taken place at the end of the fourteenth or early in the fifteenth century, for early fifteenth century details remain untouched. The thirteenth century Church was a simple parallelogram, 78 ft. by 24 ft., lit by lancet windows of the simplest form. It was, after the fire, divided by a Chancel Arch to make a Nave 52 ft. long and a Chancel 26 ft., and a finely proportioned battlemented Tower was at the same time built at the west end. It is probably to this date also that the South Porch belongs, the South Chapel being about a century later. The lancet windows had all been blocked, mostly about a century ago, when eight large wooden windows were inserted; but five of these lancets have been opened up, although, unfortunately, most of their stonework had been either removed or destroyed by fire, and in one of them was found the interesting fragment of thirteenth century decoration, painted on the plaster in red outline of the Saint—most likely St. Medw. In the restoration, the greatest care has been taken to preserve every fragment of old work, of whatever date, which can in any way explain the history of the Church. The fifteenth century roofs of the Chancel and Porch have been restored to their original state,



PROPOSED NORTH BRITISH HOTEL, EDINBURGH, LOOKING TOWARDS CALTON HILL.

details which it is not wise at the moment to disclose, Lord Tweeddale was good enough and honest enough to offer us any personal assistance he could to further any legitimate effort we might make to save the dignity of the City of Edinburgh. We shall avail ourselves of his kind offices a little later. In the meantime, we invite correspondence from everyone interested, but, on no consideration, do we invite communications to which anything but the name of the writer be appended. Many Architects are a weak-kneed lot of fellows—all anxious to express most decided opinions upon everything and everybody, but extremely

there are two sketches of the site, one as it appears with a very uncouth erection upon it, and the other with the suggested Hotel in all its glory. As Mr. Brydon asserted in his letter, and as he has repeated to us strongly since, the question of whether Mr. Beattie's design is a dignified one, or whether it is not, does not in the faintest degree influence our intentions. We wrote to Mr. Beattie asking him to address us a communication, but Mr. Beattie was away from his office, and beyond thanking us for forwarding advanced proofs of the letters already published, it did not occur to his "firm" that it was possible to

though, unfortunately, it was found impracticable, even with the greatest care, to use many of the old timbers. A new ceiling has been put to the modern roof of the Nave. The floor has been relaid to its original level, with a slope of about a foot from east to west of the Nave; the Tower Arch opened out, the old lancet windows restored, and two new stone tracery windows inserted in the place of two of the old wood ones. The old Altar stone, which was found in the pavement of the Chancel, has been restored to its proper use. The cost, when completed, will be about £1,000, and it is hoped to open the Church by the end of August.

LEEDS NOTES.

[FROM A CORRESPONDENT.]

L EEDS leaves one with the impression that its people, if they have any love for Art, are either too busy or will not take the trouble to beautify their streets. Many schemes for the improving and widening of streets have, during the last twenty years, been formulated by the City authorities, but these have been carried out in a piece-meal way, and the effect cannot be said to be satisfactory.

The City has a good Art Gallery, at which there has been this Spring one of the best Exhibitions of Pictures and Sculpture to be

cannot be said to be a success. At the top the chimneys have been made the most important feature, being arched together in a curious way, and carried up to a great height, so that it is impossible, at first sight, to say whether they are chimneys or simply ornamental features, while the gables between have dwindled to mere dormers.

The new Corporation Baths in Kirkstall Road, the first of a series which the Council is building, by Mr. W. Hanstock, seem excellently planned and thoughtfully carried out. The front seems to be somewhat out of character with the purpose of the building.

Two new Banks will shortly be in progress, one for the National Provincial Company, by Messrs. Perkin & Bulmer, which will have the lower story in granite, and be Renaissance in style; and the other for Messrs. Williams, William Brown & Co., by Messrs. Waterhouse & Son, which will also have its ground story in granite. It is to be hoped that these will add breadth and dignity to the Domestic Architecture of the City.

A limited competition is now being held for another new Bank for the Yorkshire Banking Co., which is to be erected on one of the finest sites in the City, at the corner of the City Square and Boar Lane. The site should give an opportunity for a very imposing building. The City Council has under consideration the entire rebuilding of the Markets, and the erection of a handsome Stone Front to Vicar Lane. The Committee proposes having a competition for this building, offering premiums of £100, £25 and £5.

MONEY prizes, amounting to £200, for the beautification of Stations, have been offered by the North-Eastern Railway Company. The floral decoration of the larger town Stations on the Company's system would be impossible except in a few instances, and the intention on the part of the directors was, no doubt, to encourage country stationmasters and their staffs to spend their spare time in such a way as to give pleasure, not only to themselves, but to the railway passengers. One of the conditions of the competition is that existing buildings should be utilised as much as possible, and it is curious to note the many ingenious devices employed at some of the Stations.

The eight hundred portraits at Bethnal Green Museum have now been removed to the new National Portrait Gallery. The transfer occupied a fortnight. Mr. Cust, the director of the Gallery, states that the pictures will not be ready for public view for about six months yet. An expert restorer has been commissioned to examine all the pictures carefully and to restore them where necessary. This is a work which will occupy a considerable time.

A CONTEMPORARY states that the Secretary of the Glasgow Architectural Association, Mr. Walter R. Watson, has been appointed to assist Mr. Wm. J. Anderson, Principal of the Architectural Department in the Glasgow School of Art.

At a meeting of the Perth Presbytery on Wednesday last, it was agreed to restore the Middle Parish Church, Perth, to the state it was in before the recent fire.

THE NEW CHIMES AT THE ROYAL EXCHANGE.

A PROBABLY unique performance of the new Carillon set up in the Tower of the Royal Exchange by Messrs. Gillett and Johnston, of Croydon, and identical in mechanism with the automatic chimes supplied by the firm in question to the Town Halls of Manchester and Hove, to Wakefield Cathedral, and to Eaton Hall, the Duke of Westminster's seat in Cheshire, was heard last week. The machinery of the old chimes, constructed on what is known as the "Belgian principle," by Messrs. Dent and Co., nearly half a century ago, had suffered so severely from wear and tear that of late years its "functioning" had been productive of discordant sounds, eminently calculated to grieve the judicious ear. At its best the former Carillon, though consisting of sixteen bells, had only been able to play four tunes, and had for no inconsiderable period of time played them sadly out of tune, two or three of the bells belonging to the upper register having not only undergone deterioration of tone, but lost their true pitch. The new machinery is constructed to play twenty-one several and distinct tunes, three of which are sacred melodies, to be exclusively performed on Sundays, and eighteen secular airs, told off into three week-day groups, representing the English, Scotch, and Irish nationalities respectively. After a short statement, chiefly referring to the mechanical improvements characterising the new Carillon, had been made by Mr. Gillett to a small party of persons specially invited to hear the first public performance of the entire series of English, Scotch, and Irish melodies, Mr. Deputy White severed a ribbon traversing a portion of a small room in the lowest storey of the Royal Exchange Tower, and by so doing set free the weights by which the mechanism is worked, and which will henceforth be released by the action of the great clock at nine a.m., at high noon, and at six and nine p.m. respectively. Forthwith the chimes rang out the solemn strains of "Rockingham" ("When I survey") with perfect truth of intonation, and followed on with the more cheerful measures of "God Bless the Prince of Wales." It is noteworthy that the peal of bells is tuned in such sort as to play tunes written in or transposed to the natural key and that of G, its dominant fifth. The barrel, bristling with massive metal pins, which, as it revolves, raise and release the hammers that strike the bells, is worked by a 15 cwt. weight connected with the clock; and



THE VIEW OF CALTON HILL, EDINBURGH, AS IT IS.

seen out of London, but the public are too indifferent to visit it.

Architecture, too, cannot be said to have advanced much during the last thirty years; in fact, since the Town Hall was built about 1858, there has not been a really fine building erected in the town. Of the most recent may be mentioned the Prudential Insurance Company's block in Park Row, by Mr. Alfred Waterhouse, R.A. This building is excellently planned for its requirements and substantially constructed—and I am aware that this cannot be said of all the most modern buildings in the town, many of which evidence the desire to build something adapted to requirements in the cheapest manner possible—but the Front of the Prudential Building cannot be said to be in Mr. Waterhouse's most happy manner. The Front is too crowded; it wants plain wall space.

The same Architect has designed the Yorkshire College, a large block in brick and stone. The latest addition to this group is the College Hall, which was opened last year. Externally, it has a dignified aspect, but inside it is bare, with a flat ceiling and a gallery running right across the main window (this, however, was not the Architect's fault), and, moreover, its acoustics are defective.

In connection with the Yorkshire College, a large new Medical School has been built from designs by Mr. W. H. Thorp. This building is one of the finest of its kind, admirably fitted up, and adapted to its purpose. The elevations in brick and stone shew considerable feeling, especially the side towards the Infirmary, but it is a little lacking in dignity, breadth and repose. Its Architect has too great a love for prettiness in detail. The same may be said of the new banking premises of the Yorkshire Penny Bank, by Messrs. Perkin & Bulmer. The directors of this Bank deserve praise for allowing their Architects unlimited means and a free hand; but the building shews this rather too clearly externally in the mass of carving lavished upon it.

The same measure of praise honestly given to these buildings cannot be given to two other works of a public character. The first of these is the large mass now being built on the finest site in the City, the new Post Office. This has been designed by Mr. H. Tanner, of Her Majesty's Board of Works. Here the greater part of the site has been covered with low shed-like buildings, with a false-looking Front carried up several stories higher. Too much thought seems to have been expended on this Front while the sides and back have been left to look after themselves. Even the Front



THE VIEW, AS IT WILL BE.

the hammer specially affected to the service of the tenor bell weighs forty pounds, the weight of the other hammers being proportionate to the graduated sizes of the smaller bells.

IN connection with the Methodist Free Church at Cleckheaton, new Sunday School premises, which will comprise a Lecture Hall and seventeen Class Rooms, are about to be erected at a cost of £5,000.

STILL another of the Newmarket famous landmarks has been removed. The old King's Stables, at the end of the Beacon Course, which were erected by James I. in 1609, have been pulled down.

POTTERY OF FIVE THOUSAND YEARS AGO.

AT University College, London, the Exhibition of the objects unearthed by Professor Petrie, in Egypt, will no doubt attract many who wish for detailed knowledge on the subject. Surprised as scholars must have been at the first details of these explorations, they will indeed be more astonished when they examine the large and complete Collection of Antiquities belonging to the race who some five thousand years ago established

a large and flourishing settlement in Middle Egypt. The excavations during the season of 1895 were conducted by two parties—that of Professor Petrie supported, as on former occasions, by Mr. Jesse Howarth and Mr. Martyn Kennard; and a second detachment of explorers working for the Egyptian Research Account, under Mr. Quibell and Mr. Duncan. The field covered by the work of the two parties was a small one, extending from Ballas to Nagada, about thirty miles north of Thebes, and on the west bank of the Nile. Here shortly after the fall of the Twelfth Dynasty and during the weak period of the Thirteenth, a large horde of foreigners established themselves. The ancient Egyptian town of Set-Nub, which had been founded as early as the time of the Fourth Dynasty, was deserted, and the new race founded a settlement—it can hardly be called a town—about a hundred yards away from the Egyptian town. The tombs are totally different from any of those of the native Egyptians, being on the average not more than five feet deep, and with the body laid in a crouching attitude and facing south. The objects in the tomb seem certainly to indicate a belief in immortality, as we find vessels for food and drink as well as toilet requisites. These latter objects are especially curious, consisting of combs of bone and ivory neatly carved, with handles in the form of stags or gazelles; large jars (one holding over two gallons is exhibited) of scented fat; and slabs of slate

with a small portion of green malachite upon them, and a rubber. These objects were, no doubt, used to prepare the paint with which to adorn the body. They have, however, an interest beyond revealing to us the vanity of this ancient race, as the forms which they assume afford interesting information as to the surroundings of these people in their primitive home. They assume the form of various animals—the gazelle, ibex, elephant, fish of various kinds, and the turtle. Whatever opinion may be formed of the theories put forward by Professor Petrie during his very brilliant archæological career, he has at least the merit of having been the first to show that

it is the small objects, and above all the pottery, which are the most important in establishing the date and the character of a primitive settlement. Here the study of the pottery is indeed the solution of a number of difficult problems which arise in connection with this astonishing discovery. The earlier pottery is indeed remarkable. The beautiful contours of the vases and their unvarying regularity of form at once arrest attention. We find that the whole of this work is hand made and not worked upon the potter's wheel, each article being built up, smoothed, and

between the pottery decorated with a wavy line as a handle and that found by Professor Petrie and Mr. Bliss in the excavations at Tel Hesi, the site of the ancient Lacish. There seems little doubt, therefore, that we may class these invaders of Egypt as part of the same race whom we find later in the fair Libyans and the Amorites of Syria. More remarkable still are the series of painted vases, which are probably, as Professor Petrie suggests, imported ware. The vases are of a buff colour, with the designs painted in red. The designs represent ships, with many oars and two large

steering oars, and double tents like cabins on deck. The most curious feature, however, is the standard with which each ship is provided, and which is placed upon a pole over the principal cabin. These standards vary, and either represent the names of the ships or the towns from which the traders came. They include such emblems as an elephant or ostrich, or trees, birds and hills. Much of this pottery resembles that of Crete, Cyprus and the Troad, and would seem, along with the ship vases, to connect the importers with the wandering bands of traders and merchants who sailed round the coasts of the Mediterranean.

NOTHING could be done to extinguish the fire in the Tower of the Parish Church at Callington, Cornwall, which was discovered to be on fire early on Tuesday morning, and which burnt itself out in less than three hours, destroying the splendid peal of six bells, cast by Pennington in 1777, and the clock erected by public subscription about thirty years ago. The Tower, which is of granite, and about 100 ft. in height, surmounted by four pinnacles, is seriously damaged, and the upper portion will have to be rebuilt.

MIDDLETON TOWERS, Norfolk, for many years the home of the late Sir Lewis Jarvis, has been sold privately for less than half the amount it was valued at a few years ago. The Castle of Middleton was built in the reign of Henry VI., and that part of the present Mansion

which up to a recent date was known as the Old Tower, was the gateway of the original building. Sir Lewis Jarvis, at enormous cost, had the whole place restored.

TENDERS are invited for the preservation and repairs of the local Harbour at Ancona for a period of five years. Some further particulars may be seen on personal application at the Commercial Department of the Foreign Office, between the hours of 11 and 6 daily.

AN Architectural competition has been opened by the proprietors of the *Figaro*, limited to French Architects, for designs for an important addition to their premises in the Rue Drouot.



INTERIOR OF ST. MARK'S, VENICE: FROM A DRAWING BY H. L. FLORENCE.

polished by the hand. The fact of the polishing being vertical and not horizontal is proof of this. This hand-made pottery is particularly interesting, as the custom exists to this day among the Kabylee tribes of North Africa, whose pottery bears a most striking resemblance to that of the "New Race." It, however, survives also in Egypt, where there is a large production of hand-made pottery at Ballas and other districts of Middle Egypt, entirely the work of women, the wheel-made pottery, which is a very extensive industry in Egypt, being entirely the work of the men. The pottery, however, affords more information than this. There is a distinct resemblance

HENRY TEIXEIRA DE MATTOS.

WE lately paid a visit to 49, Hugh Street, Eccleston Square, the studio of Mr. de Mattos, a Dutch Sculptor, a man well-known in his own country and ambitious, like so many foreign artists who have come over to win honour and distinction in the land of their adoption. To do this is open to every man of talent and energy, and talent and energy Mr. de Mattos possesses. Doubtless a painter has fairer prospects than a sculptor, for the sculptor's Art is less popular amongst us and more costly in its production. Few private individuals have space enough in their own houses for the exhibition of Sculpture, and public bodies have but little money at their disposal for its commission. The time may come when our Parks and other places of public recreation will be adorned with statuary by well-known men, and public funds devoted a little more lavishly to the acquisition of it.

In Mr. de Mattos' Studio, Mr. J. Sherwood Westmacott resided, previous to his retirement from active work. He was a man of great talent, a worthy successor of his uncle, Sir Richard Westmacott, R.A., and his cousin, Professor Westmacott, R.A. Nothing could be more striking than the difference in the work, conception, and execution of Mr. J. Sherwood Westmacott and in that of Henry Teixeira de Mattos. In the former's work refinement and delicacy of execution were noticeable in every detail; in the latter's, vigour, boldness, and a certain ruggedness of treatment prevails. Mr. de Mattos is an "impressionist" in marble, and delicacy of execution is supplanted by bolder handling, which may shock many preconceived ideas of what Sculpture should be. But it is refreshing to discover a man who has the courage of his opinions, combining the creative talent with a thorough knowledge of his Art. Mr. de Mattos' work commands a great deal more than this even. We give two illustrations of his conceptions: "The Cub Stealer," and a Crucifixion. The first is life size, or perhaps, more than life size, a work only suitable for a large Gallery. It represents a powerful negro robbing a panther of her young, and the infuriated animal has surprised him in the act. Characteristic ferocity is powerfully shewn in both figures, and the terrible strain upon the negro's strength is admirably depicted.

This is undoubtedly a work of genius: it is terrible in its inception; can lay, and does lay, no claim to please the many; but it is nevertheless a fine imagination and appeals to men who know what Art really is.

The Artist here illustrates his views on how Sculpture of this class should be treated. It is fierce and bold and the chisel marks are undisguisedly shewn and lend a rugged charm to the work, refreshing in its vigour, original in its conception, a departure from the tameness which so frequently characterises modern Sculpture. The other example of this Sculptor is one which from the dawn of Christianity has exercised a fascination for Artists and has claimed more of their devotion than any other.

Mr. de Mattos tells us that this is the first time he has attempted to represent the sublime tragedy of the Crucifixion, and how absorbed he became in working out his conception of it. This figure of the dead Christ is no conventional representation, no tame effigy, but a "man of sorrows" who has suffered that most terrible and agonising torture, death on the Cross. There is the dead Christ; the head has sunk upon the breast, the muscles of the arms and chest show the terrible tension; the whole figure expresses the agony that has now been passed, and the drawn features tell the tale of resignation and suffering. The Artist relates how, to convey his ideal, he modelled from a man who hung by his hands, and so painful was this, that only for a few minutes could the model sustain the strain of it. "Too painfully real" will be the verdict of

many, may be of the majority, perhaps. But here is a man who has dared to depict the realism of that dread event of Calvary. For our own part, we welcome the daring, and would fain see the work of such men as Mr. de Mattos in our Churches, than the constant reproductions of tame Sculpture which are generally to be found, and upon which it were waste of words to comment upon.

Happily there are signs that Architects are becoming alive to the importance of intrusting the sculpture of the figure to individual Artists, and not to tradesmen. The late J. D. Sedding set a noble example in this respect, and other men are following in his steps, so that the time may come, and soon, when our Churches may have Painting or Sculpture by distinguished men. Who that has travelled abroad and visited the old Churches, has not found how his imagination has been fired, his intellect aroused and his eye educated and charmed by beautiful Art, the work of men whose names are deathless, and who have made the Churches famous for their conceptions? In our own time Reredoses by the hundred have been erected, windows put in, paintings executed, and



A CRUCIFIXION: HENRY TEIXEIRA DE MATTOS.

yet it would be difficult to point to many that rise above mediocrity. If Architects pressed upon their clients how all important it is that the figure, if represented at all, should be represented by accomplished hands; and if Architects would be content to interfere as little as possible in what is best left to the Artist, our buildings would gain in interest, our Churches would be more beautiful, and Painting and Sculpture would find a home amongst us, and the men would be forthcoming to do good work. Mr. Richmond's beautiful mosaics in St. Paul's Cathedral point to this most desirable consummation.

There are many objects of interest in Mr. de Mattos' studio, which illustrate his individuality. His busts are powerfully modelled, and he can use his brush with skill and ease. We shall welcome the news that Henry Teixeira de Mattos—who has taste, like most good men, the bitterness of hope deferred—has obtained the appreciation his work demands.

A NEW Chancel has been added to the Church of St. Sabinas, Woolacombe, at a cost of £200.

THE FAMOUS SPEETON CLAY.

YORKSHIRE GEOLOGISTS AT FILEY.

AT a point about four miles from Filey, recently visited by members of the Yorkshire Geological and Polytechnic Society, the purple boulder clay gives place to a black clay, known to Geologists by the name of Kimmeridge clay. This in its turn is succeeded by the Speeton clay, which is of neocomian age. This particular section of clay, which underlies the chalk, is of special interest to both the amateur and the professional Scientist, and Geologists from all parts of the World come to see it. To amateurs it is attractive because it yields such fossils and ammonites and belemnites which lend themselves so readily to an effective display when placed in a cabinet; while those who may perhaps be best described as professional and technical Geologists regard the beds as of value because of the unique character of their situation and development, and because, in the opinion of many, they give the key to some of the problems relative to the succession of secondary rocks. The Speeton beds are the marine equivalent of

the Wealden deposits of the South of England, which are fresh-water deposits. The beds at Speeton have been carefully studied by Professor Judd, and more recently by Mr. G. W. Lamplugh, of the Geological Survey, and he divides them into three zones by means of certain belemnites. The lowest zone is represented by *Bel. Lateralis*, the zone above it by *Bel. Jaculum*, and the upper bed by *Bel. Brunswickensis*. Bearing this division in mind, a section of the party made minute examinations, and were successful in finding specimens of all these three belemnites. Other fossils discovered included *Crioseriasturte*, *Exogyra sinuata*, *Vermicularia Sowerbyi*, *Am. Speetonensis*, and many more that the Geological Student might expect to find here. Struggling bravely over the huge boulders that carpet the beach beyond this point, the explorers passed under the shadow of the great perpendicular cliffs—the paradise of the climber and a favourite haunt of those who in due season find pleasure in shooting the beautiful gulls that cluster hereabouts. It was, of course, to see that most interesting geological object—the section of red chalk, that the travellers, by this time footsore with their travels, imposed upon themselves this further mortification. As most people who have read anything about the geology of this part of the coast are aware, this section of red chalk is the Hunstanton limestone, corresponding to the Gault of the South of England, and forms the base of the cliffs. It is a delightful spot for the fossil hunter, but its inaccessibility at certain states of the tide is a difficulty which has yet to be got over. To reach the place it is necessary to trudge for a long distance over a rough roadway

of big boulders, and then, as one disappointed Geologist expresses it, "the tides are up almost before you can get there." The upper beds of the chalk have not yet been properly worked out. They certainly offer a rare field to adventurous Geologists, who would probably be able to attain their object by chartering boats or descending by means of ropes after the manner of the famous egg climbers on the Bampton side of the cliffs. The exploration of the upper beds has been accomplished to some extent from the inland, but the results await verification and amplification, such as only a thorough examination of the seaward sections could furnish.

THE funeral of the late Mr. Thomas Chatfield Clarke took place at Highgate Cemetery, on Wednesday last. Mr. Shoppee (ex-President) and Mr. Rogers (Secretary) were present on behalf of the Surveyors' Institution, of which the deceased was President last year, as well as representatives of numerous other organisations with which he was prominently connected.

Professional Items.

ARMADALE, SKYE.—Mr. Woulfe Brenan, C.E., Oban, has made a survey of the Bay, and is now preparing plans for the new Pier which Lord MacDonald proposes to erect at this port for the south of Skye.

BIRMINGHAM.—The following is a list of the papers which it is expected will be read during the autumn meeting of the Iron and Steel Institute, which takes place in Birmingham on August 21st, 22nd and 23rd next:—(1) "The Direct Puddling of Iron," by E. Bonehill; (2) "The Thermo-Chemistry of the Bessemer Process," by Prof. W. N. Hartley, F.R.S.; (3) "The Hardening of Steel," by H. M. Howe; (4) "The Mineral Resources of South Staffordshire," by H. W. Hughes, F.G.S.; (5) "The Iron Industry of South Staffordshire," by D. Jones, Secretary of the South Staffordshire Ironmasters' Association; (6) "Tests of Cast Iron," by W. J. Keep; (7) "Small Cast Ingots," by R. Smith-Casson; (8) "The Estimation of Oxide of Iron in Steel," by A. E. Tucker, F.I.C.; (9) "Tests of Cast Iron," by T. D. West; (10) "The Use of Nickel in the Metallurgy of Iron," by H. A. Wiggins.

BRADFORD.—At the last meeting of the Bradford (Yorks) School Board plans were passed for new Infants' Department at the Princeville School, and the addition of the present Infants' School to the Mixed School, at an estimated cost, for building and furniture, of £2,300. The total amount of work passed was for £4,419.

BIRKENHEAD.—Additions are to be made to the "Claughton Concert Hall," Birkenhead, which comprises a large promenade room. The contract has been let to Messrs. McLachlan & Batkin for £600. Plans have been prepared, and the work will be under the superintendence of T. Taliesin Rees, Architect, Hamilton Street, Birkenhead.

BURNLEY.—The Foundation Stone of St. Alban's Church, Todmorden Road, Burnley, has been laid. On plan, the Church will consist of Nave of seven bays, with small Transept towards the easterly end of South side, and Organ Chamber on the North. A lofty arch will give entrance to the polygonal-shaped Sanctuary, the windows of which are high up above the adjoining Vestries. Accommodation will be provided for 673 adults. Externally the Church will be of stone. The west window is a large six-light traceried one, and over it is a niche for the Statue of St. Alban. The Architect is Mr. Medland Taylor, F.R.I.B.A., of Manchester.

CAMELFORD.—The Chapel which is to be enlarged and to have new Schools, in Fore Street, Camelford, was built about sixty years since. Outside it has rather a bold appearance, but the interior arrangements would not favourably impress a lover of Architectural beauty. One of the side Galleries is erected over a narrow roadway leading to the river. At one time it was thought advisable to sell the Chapel and build suitable premises on a new site, but Messrs. Wise & Wise, Architects, of Launceston, were consulted, and plans were prepared by them for what will be practically a new Chapel and School Room. The School Room will be mainly over the roadway already referred to, but will allow for two good Vestries or Class Rooms under. There will be two entrances, the main one opening into the Vestibule leading to the new Gallery at the end of the Chapel, the other—the present entrance—leading to School Room, Vestries, and Lavatory. The windows will have leaded lights of tinted glass. Pitch pine will be used for the interior of the building, and the walls will be built of stone obtained from the Fenterton estate, with granite dressings. The contractors are Messrs. Hooper & Dennis, the amount of their contract being £645.

CARDIFF.—Mr. E. Seward is preparing plans for a new Museum building in Park Place, to cost about £12,000, for the Cardiff Corporation.

DEVONPORT.—Mr. Henry Geo. Luff, Architect, has been commissioned to prepare plans, &c., for converting No. 7, Fore Street, Devonport, into a Conservative Club for Devonport. The premises, when completed, will have a spacious Bar, Billiard, Reading, Card, Smoking, and Secretary's Rooms, and a Bowling Saloon and necessary Offices. A handsome Portland cement Front is to be erected in the place of the present glass bulk, which, when finished, will be a great improvement to Devonport.

EDINBURGH.—The Theatre Royal has been under extensive alterations. A very complete installation of the electric light has been made. The ceiling has been formed into panels with effective wood mouldings, and the panels filled in with high relief cordelova, a material made from pulp and extremely light, which gives all the effect of modelled plaster work. The treatment in silver and blue is novel and successful. The wall spaces immediately under the ceiling and the recesses above the boxes to the right and left of the proscenium have also been covered with this material, a high relief design being used and treated in rich gold ornament and ivory background. The walls of the house have been papered in a rich tone of red, which enhances the value of the ivory and gold plaster work. The whole of the decorations have been carried out by Mr. Thomas Hall, 8, George Street.

IRELAND.—The Council of the Institute of Civil Engineers' of Ireland has awarded a Mullin's Gold Medal to Mr. W. Kaye Parry, A.M.I.C.E., for his paper, entitled "The Application of Recent Advances in the Study and Treatment of Sewage."

KILMALCOLM.—The new Free Church at Kilmalcolm stands at the junction of Bridge-of-Weir Road and Glebe Street. The style adopted is the Early English period of Gothic Architecture, which is treated in a bold, effective, and simple manner. The whole of the mason work is of white freestone from Auchinlea Quarry, all the openings having chiselled chasings, and the walls are faced with rock-faced rubble work. Including the end Gallery, the Church has comfortable sitting accommodation for 450 persons. The floor has a slight fall towards the Pulpit, which is placed in a shallow recess and kept as low as possible. The wall on both sides of the Pulpit is finished with cusped panelled woodwork, 7 feet high. The Spire rises to a height of 105 feet. The cost of the erection is nearly £3,000. Mr. Wm. Tennant, Hope Street, Glasgow, was the Architect.

LANCASTER.—The plan for the Marsh Board School will consist of a Large Hall to accommodate 180, two Class Rooms 72 each, and six ditto to hold 60 each—making total of the mixed department, 684. The Infants' Department will consist of Large Room for 180 infants, Babies Room for 60, and Class Room for 60—total 300. Total capacity of School accommodation, 984. The estimated cost of the Infants' School, to be built first, is £2,000, exclusive of boundary walls and playground. The Corporation has decided to apply for power to borrow £17,000 for the purpose of opening out New Street, adjoining the L. & N.W. Railway Station.

LIVERPOOL.—The tender of Messrs. Henshaw & Son, Chatham Street, Liverpool, for the erection and completion of the proposed new Central Fire Station and Police buildings in Hatton Garden, in accordance with plans and specification and quantities, for the sum of £33,594 has been accepted, subject to the Local Government Board approving of the plans and sanctioning the borrowing of the sum of £35,000.

MANCHESTER.—The Manchester School Board has under consideration the re-building of the Central School, Deansgate, in a central position, in consequence of its purchase by the Great Northern Railway Company. In view of the large public expenditure thereby involved, it seems desirable that the Technical Instruction Committee and the Manchester School Board

should come into conference, with the object of considering whether or not the work now carried on in the day and evening departments of the Central School might not be provided for in the new Technical School Building.

MEVAGISSEY.—The new Chapel and School at Mevagissey, which about twelve months ago were destroyed by fire, will be of modern style, and of more elaborate Architecture than the old. The Chapel, to be built of local stone with granite dressings, will be in Gothic style, and will accommodate about 400 people. In the Front will be two entrances, with double doors opening outwards. The windows will have Cathedral-tinted glass. The interior fittings are to be of pitchpine and mahogany. Attached to the Chapel will be a Vestry, and adjoining a School building, with Class Rooms. The work will probably be completed by next March. The Architect is Mr. F. C. Jury, of Tregonissey, St. Austell, and the builders, Messrs. Moyle and Mitchell, of Chacewater.

NOTTINGHAM.—In the competition for new Chapel and Sunday School, for the United Methodist Free Church, Gregory Boulevard, Nottingham, the design of Mr. F. W. Dixon, Architect, of Manchester and Oldham has been selected.

OKEHAMPTON.—The Okehampton School Board has accepted the tender of Messrs. Harris & Sleeman in £493 18s. to erect Fowling Down School. The only other tender was Mr. J. Brooking, Northlew, £495. Mr. Harry Geen's plans for East Street Boys' School were adopted, and he was asked to prepare an estimate.

OTLEY.—The Corner Stone of the Science and Art Schools at Otley was recently laid by Mrs. Fawkes, of Farnley Hall. The accommodation on the ground floor comprises four rooms, to be used for Model and Freehand Drawing, Painting, Perspective and Geometrical Drawing, and Art Master's Room. The rooms are separated by movable partitions, so as to be convenient for large or small Classes and Exhibition purposes. The upper floor will be used for Laboratory, capable of accommodating twenty-four students, with Platform at one end and Class Room adjoining. There are also rooms for Manual Labour Classes—Wood Carving, Cooking, &c. The drains are glass-lined iron pipes, and all stone is from local quarries. The Corridors giving access to the rooms are fire-proof red polished concrete. A. Marshall, of Otley, is the Architect.

PENARTH.—The Penarth School Board is about to invite a limited number of Architects to submit designs in competition for new Schools at a total cost of about £8,000, though it is understood only a portion of the Schools will be built at present.

PONTEFRAC.—Messrs. Tennant & Bagley, of the Market Square, Retford, have been successful in getting their plans accepted by the Pontefract Town Council for the new Hospital, estimated to cost £5,000.

RENDCOMB, GLOS.—St. Peter's Church, Rendcomb, Gloucestershire, was re-opened on St. Peter's Day, after undergoing considerable alterations from the designs and under the superintendence of Mr. F. R. Kempson, of Cardiff and Hereford. Messrs. Collins & Godfrey, of Tewkesbury, being the contractors. During the progress of the work some interesting features were brought to light, among them being portions of a thirteenth century Arcade and the north doorway to the Nave.

STRATHBLANE.—The Window erected in Strathblane Parish Church to the memory of Mr. Guthrie Smith, has for its subject Christ appearing to the woman after His resurrection, as recorded by St. Matthew, when He met them, saying, "All Hail." The robe of Christ is in white, the other robes are respectively ruby and a deep yellow. The figures in the bottom panel represent the angel appearing to the Marys at the sepulchre and saying to them "He is not here, for He is risen." The canopy is Gothic in style, and is treated in

silvery tones of white on a blue background. The Window was constructed by Messrs. J. & W. Guthrie, Glasgow and London, to the design of Mr. Gould.

ULVERSTONE.—Building operations have been commenced for new Infant Schools, Church Walk, Ulverstone, to hold 300 children in connection with the Church, from plans by Messrs. J. W. Grundy & Son, Architects. The Memorial Stone will be laid on the 23rd inst. by the Duchess of Devonshire.

YELVERTON.—Mr. Charles King, Princess Square, Plymouth, has designed an excellent edifice to accommodate about 150 worshippers, as a Chapel of Ease to the Parish Church of Buckland Monachorum. It consists of a rectangular building and Vestry, lighted with lancet windows, a group of five well-proportioned windows being placed at the east end, and all being filled with Cathedral glass. A hanging lamp in front of the Chancel and six lamps on handsome brackets, serve for lighting the building at night.

YORK.—At St. Peter's School, York, the new Gymnasium was recently opened by Major-General Thynne. The Gymnasium is 60 ft. by 30 ft. and 33 ft. high inside. At the entrance nearest to the School are two Dressing Rooms with Gallery over. The building has an open timber roof. The style of Architecture is Late Gothic to harmonise with the existing buildings. The room is lighted by four tall mullioned windows on each side and by a large traceried window facing the Clifton Road, and others over the Gallery. Over the west doorway are carved the arms of the Dean and Chapter of York, and over the south doorway a sun-dial and armorial bearings. Mr. Francis W. Bedford, A.R.I.B.A., of Leeds and Westminster, was the Architect. The carrying out of the main portion of the work was entrusted to Mr. T. P. Barry, of York.

THE ORGAN IN BACH'S TIME.

THE Organ as it existed in Bach's day, and as in most essentials it exists now, is an instrument peculiarly suggestive in regard to the realisation of the finest and most complete effects of harmony, of modulation, and of that simultaneous progression of melodies in polyphonic combination which is most completely illustrated in the form of composition known as the fugue. It is so for two or three reasons. In the first place, it is the only instrument in which the sounds are sustained with the same intensity for any required length of time after they are first emitted; however long a note may have to be sustained, its full value is there until the moment the finger quits the key; a quality which is invaluable when we are dealing with long suspensions and chains of sound. Secondly, the opportunity of playing the bass with the feet on the pedals, leaving the left hand free for the inner parts, puts within the grasp of a single player a full and extended harmony and a freedom of manipulation such as no other instrument affords. Thirdly, and in the case especially of fugue compositions, the immense volume and power of the pedal notes impart a grandeur to the entry of the bass part in the composition such as no other medium for producing music can give us. In the time of Bach this splendid source of musical effect was confined to the great Organs of Germany. The English Organs of the day had, in general, no pedal board, and it is probably owing to this fact more than to anything else that Handel's published organ music is so light, and even ephemeral, in style, as compared with Bach's—that he treated the Organ, as Spitta truly observes, merely like a larger and more powerful harpsichord: without the aid of the pedal it would be rather difficult to do otherwise; and the English Organs of the day were in every respect a much lighter and thinner affair than the "huge house of the sounds," the thunder of which was stored in the Organ Gallery of many a Lutheran Church.

The Spire of St. John's Church, Bognor, is being rapidly completed, and it is expected that the work will be finished during the present month.

SOCIETY MEETINGS.

Members of the Society of Engineers Visit Dover.—A visit was paid by the Society of Engineers to the Outer Harbour Extension Works, the existing Harbour, and the Electricity Supply Co.'s Station, at Dover, on the 3rd July last. Among those present were Mr. Wm. Geo. Peirce (President), Mr. Joseph Bernays, Mr. Jabez Church, Mr. Charles Gandon, Mr. George A. Goodwin, and Mr. A. T. Walmisley (Past Presidents), Mr. G. Maxwell Lawford (Vice-President), Mr. Charles Mason (Member of Council), Mr. J. C. Coode, Sir William H. Crundall, J.P. (Mayor of Dover), Sir John Jackson, Mr. G. A. Pryce Cuxson (Secretary), and others.

The Dover Outer Harbour Extension Works now under construction at Dover have been designed for commercial purposes, and not as a Harbour of Refuge, the chief object being the provision, in all states of weather and tide, of accommodation for the embarking and landing of passengers on and from 'cross channel steamers. The powers for the construction of the Harbour were obtained by the Dover Harbour Board in 1891. The work now under construction, as a first instalment of the complete design, is the East Pier, the contract for which is being carried out by Sir John Jackson, Messrs. Coode, Son, and Matthews being the engineers.

The Admiralty Pier and Inner Harbour affords protection to the western side of the new works. There are two basins: one known as the Wellington Basin of about 3½ acres, with gates of 70 ft. opening, and the other, the Granville Basin of 4½ acres, with gates of 65 ft. opening. The present Outer Harbour of 13½ acres will become an Inner Tidal Harbour at the completion of the extension works. A new Lighthouse with a masonry Tower, surmounted by a lantern of the fourth order, is being erected at the turret end of the Admiralty Pier, and the slipway at the upper end of the Wellington Basin is capable of hauling up a safe load of 800 tons. Mr. A. T. Walmisley, as Engineer to the Dover Harbour Board, has charge of the Admiralty Pier and Inner Harbour.

The Dover Electricity Supply Co.'s Station consists of offices occupying the west portion, and adjoining these are the Engine and Boiler Rooms. The Engine Room, which is faced with glazed bricks throughout, is 100 ft. in length by 30 ft. in width; the Boiler Room is 100 ft. long by 45 ft. wide. The Engine Room contains the main engines and dynamos, which at present are two 100 K.W., one 75 K.W. and one 50 K.W. Morley Alternators, each coupled direct, through a flexible coupling, to Raworth vertical compound condensing engines, in which forced lubrication is adopted. Situated on one side of the Engine Room are two continuous current dynamos, coupled direct to vertical compound tandem engines. The Engine Room also contains two Tangye's centrifugal pumps, coupled direct to vertical engines, which draw water from the river Dour at a point about 100 yards distant, for use in the condensers, attached one to each of the main engines. All the engines are supplied with steam from a ring main, situated in the Boiler Room and drained by a McDougall steam trap. There are at present twenty-one public arc lamps in the streets, each of 2,000 N.C.P. The contract for the whole of the machinery has been, and is being, carried out by the Brush Electrical Engineering Company, Limited.

Institute of Civil Engineers.—The Council of the Institute of Civil Engineers has re-appointed as treasurer Mr. Hugh Lindsay Antrobus; as hon. secretary, Dr. William Pole, F.R.S.; and as the secretary, Mr. James Forrest, which office he has filled for the past thirty-nine years.

The Architectural Association.—The district round Cheltenham has been chosen for the excursion of this Association, and will furnish some Gloucestershire houses of Architectural interest, and some degree of freshness will be imparted by a steam launch trip up the Avon in the Pershore country, starting from Tewkesbury. The excursion will thus encroach to some extent upon the places visited during the Worcester excursion, when Mr. Aston Webb was president, and it nearly reaches the neighbourhood com-

prised by the Warwick programme. Cirencester, with its grand Church and great Porch, is too far across country to be reached from Cheltenham, and difficulty of access will exclude Northleach and Stowell, where Earl Eldon has a new house of some consequence. On Monday, August 12th, going northwards from the headquarters at Cheltenham, the excursionists, under the guidance of Mr. W. D. Caröe, will visit Southam House, with its farm-buildings, and Bishops Cleeve, with its Church and old houses, will make out the day. On Tuesday, Tewkesbury Abbey, old Bridge, and timbered houses in the streets will be seen, with the river trip to follow. Wednesday is to be devoted to Chastleton, on the borders of Oxfordshire. On Thursday, Broadway, interesting by reason of the old houses and Church, Staunton, Stanway, and Brickland will be visited. Friday is to be occupied at Severnhampton, Winchcomb, and Sudeley Court. On Saturday, the Associationists will take the City and Cathedral of Gloucester on their way home.

Congress of Archaeological Societies.—Delegates from all parts of England attended the Congress of Archaeological Societies, held on Thursday last, at the rooms of the Society of Antiquaries, at Burlington House, London. The subjects brought forward for discussion were (1) the better preservation of Municipal records, (2) County bibliographies, (3) the treatment of monumental remains, and (4) the present state of the Ancient Monuments Act. Sir John Evans, in speaking on the first subject, said that it was very desirable that all ancient records, whether in the hands of County, Municipal, or Charity authorities, Guilds, or other bodies, should be calendared, kept in a fireproof place, and rendered accessible to the public where possible. Mr. Paley Baildon expressed an opinion that the present custodians of such documents were in many cases grossly incompetent; and suggested that an Act of Parliament should compel all bodies of the kind to deposit their charters, &c., either in the Public Record Office or in a specially constructed building in each county. In discussing the treatment of monumental remains, Mr. St. John Hope pointed out the great amount of damage that was being done to sepulchral brasses and other monuments in Churches. One of the worst pieces of vandalism mentioned was the removal of several important 17th century tombs from Gloucester Cathedral when it was restored by the late Sir Gilbert Scott. They are now buried in the Dean's garden. Perhaps the most useful thing done by the Congress this year has been the bringing before the meeting the question of the Ancient Monuments Act, which has now become a dead letter, the Government having refused to schedule any more monuments or spend any money on those already placed under the Act. Mr. G. L. Gomme proposed that pressure should be brought to bear on the Members of Parliament for each county to compel the Government to put the Act into force.

AFTER several years' arduous work in sinking operations on a large scale at Aberdare Junction—a virgin coal district—by the Dowlais Company, what is known as the four-foot seam of fine steam coal, corresponding with the vein worked at Albion Colliery, has been reached by the sinkers. The coal won proves to be seven feet thick.

ON Tuesday a new Bridge over the River Welland was opened at Spalding. The Bridge, which is for vehicular traffic, has been erected by the Midland and Great Northern Railway Companies. With the exception of foot-bridges, there is only one other Bridge over the river at Spalding—about a mile distant from the present structure.

SHOREHAM is rapidly becoming a favourite place for those fond of residences of the Bungalow type, a number of these having been erected since last summer, while others are in course of construction. The beach where the Bungalows are situated is thus becoming quite a busy spot, and though practically shut off from the town by the river, the residences are easily accessible by way of the Norfolk Bridge.

PLANS for the new Hospital at Inverurie, have been prepared, and the expenditure on the site and buildings is to be kept within the sum of £2,000.

SAWDUST.

AN interesting little function which recalled the brilliant opening ceremony of the Bexhill Municipal Buildings, took place prior to the last meeting of the Bexhill Council, Viscount Cantelupe unveiling a Tablet, commemorative of the opening, which has been placed in a Corridor of the Municipal Buildings. The Tablet has been excellently carved by Mr. G. Roselieb, the design being the work of Mr. Stanley Young, son of Mr. H. Young. On either side of a bronze plate there are figures representing "Agriculture" and "Justice," supporting a canopy, carved in oak.

ON Friday the Foundation Stone of a new Lending Library in St. Domingo Road (opposite St. George's Church) was laid by Lord Stanley, M.P. The building contains a Lending Library, a large News Room, and general Reading Room for men, and separate rooms for women and boys; while accommodation is also provided for various technical classes.

HOLY TRINITY Church, Bristol East, for some time has been in a dilapidated state. Efforts are being made to raise several hundred pounds to restore the churchyard walls, to clean and paint the Church, and to improve the lighting. At a meeting of the Church Council recently, it was resolved to erect Choir Stalls, so as to have the Choir at the East end of the Church.

THE new sewer through Cross Street, Moretonhampstead, has just been completed by Parker Brothers, the contractors. It is not the intention of the authorities to proceed with another section of the work for some months, it being thought best to do it in sections at convenient times, so that the streets shall be clear and in good order during the time when so many visitors are staying in the district.

THE Prince and Princess of Wales have consented to open the new Front Building of the Royal Free Hospital on Monday, July 22nd. The cost of the new buildings, and of various other improvements which have been carried out during the past two years, amounts to £30,000, towards which sum £24,000 has already been raised.

THE Rotherham Town Council has applied to the Local Government Board for sanction to borrow £21,500 for the purchase of land, and the erection thereon of police buildings; for the purchase of the Mechanics' Hall; and for the alterations to municipal buildings. Mr. F. Herbert Tulloch, M.Inst.C.E., an inspector of the Local Government Board, has been appointed to hold an inquiry on the 16th of July. Increased accommodation for the police is urgently needed. The scheme, which has been on hand for a considerable period, includes the provision of a Borough Court.

ON Tuesday last the Foundation Stones of new Schools in connection with Rounds Green Church were laid. The total cost of the Schools will be £600. The accommodation provides for about 320 children. The building when erected will be used as a Sunday School, also, if necessary, for Elementary School purposes. Previous to the ceremony a service was held in the Church, at which the Bishop of Coventry preached.

THE "Cattley" Memorial Window at Worcester Cathedral was recently dedicated by the Dean. The Window was designed and executed by Messrs. John Hardman & Company, of Birmingham, is a four-light one, and is situated at the west end of the North Aisle. The original intention was to represent the subject of the Ascension, but as this subject is not suitable for a four-light window, the Artists suggested that as Worcester was the first Cathedral to be thoroughly restored, the design of the Window should be founded on the text, "Lord, I have loved the habitation of Thy house, and the place where Thine honour dwelleth."

At the sale of the treasures of a Japanese Daimio, at Foster's Gallery, 54, Pall Mall, two old sword-guards by Hirata Donin realised £15 each, a fine lacquer writing-box and panel by Ritsuo £45, and old coloured prints by Hiroshige, Haronobu, and Outamaro, in series, from £25 each set.

THE Camberwell Guardians have borrowed £2,000 from the London County Council, for the erection of Workhouse Workshops.

Correspondence.

"THE ARCHITECTURE THAT MUST BE ORIGINAL."

To the Editor of THE BUILDERS' JOURNAL.

DEAR SIR,—I am an optimist, and rejoice in that which is good—the Greek of Thomson, the Italian of Barry and Charles Wilson, the Roman of David Hamilton and Stark, and the Old Scottish and Italian of Rothead; also such good work as that of the Edinburgh men of fifty years ago—the High School by Hamilton, the Royal Institution and the Quadrangle of the University by Playfair, and the Calton Jail and the Royal Bank (Glasgow) by the Elliots.

But I abominate that prevalent Architecture which must be original—something that was never done because it was never worth doing; the new but not the true—original only in being a departure from what was the outcome of original Genius, as Tom Thumb and the Siamese Twins were departures from the original and true type of humanity. A common example of the prevailing "originality" is the wanton prostitution of "the Orders"—in their application, their proportion and their details; in the acute accentuation of particular features instead of a regular rhythm throughout; and in the suffocation of parts, to which the plan invited breadth, by masses of pompous and obtrusive ornament—"where honey-suckles, ripen'd by the sun, forbid the sun to enter." Shakespeare, who knew a good deal about most things, said "the World is still deceiv'd with ornament," and it is remarkable that the Edinburgh High School, the Quadrangle of Edinburgh University, and the principal facade of Glasgow St. George's Church—all buildings of the highest excellence—have scarcely been touched by the carver's chisel.

Many of our modern buildings remind us of the tricks of the modern musician in his "Variations" on old Scottish airs, in which the old Scottish air peeps out at intervals as a rippling brook endeavours to do occasionally from among the weeds that entangle it. The Architect has chosen a correct enough model, but he cannot let well alone; his individuality is greater than that of him by whom the style was created. Nevertheless, the old model is, in the hands of Genius, susceptible of endless varying. The Temple of the Parthenon was the model of at least part of the Edinburgh High School, and the Italian Palaces of the London Reform Club-house. What is wanted, and what seems to be despised, is Judgment. In a paper on "Greek Thomson" that I read some years ago before the Glasgow Architectural Society, I said: "He had, with the rich inventive imagination, the twin concomitant of Genius, the exact and all-governing Judgment. Genius sees its own limits. If it has not paced all its perimeter, it knows at least its own diameter. Judgment deters it from seeking to look into the unknowable. If its range be within a garden of culture, it will not seek to overleap the walls that it may explore the briars and brambles of the wilderness beyond.—I am, Dear Sir, Yours most truly,

THOMAS GILDARD.

133, Berkeley Street, Glasgow.

THE Foundation Stone of St. Alban's Church, Burnley, one of four new buildings about to be erected in the town as the result of an endowment by the Rector of Burnley, was laid on Saturday by Mr. W. A. Lindsay. It will seat 800 persons.

JULY 23rd has been fixed for the laying of the Foundation Stone, by the Duchess of Devonshire, of the new Infant School at Church Walk, Ulverston, Lancs.

EXTENSIVE alterations and additions are being carried out at the Trent Valley Brewery, near Lichfield, by Messrs. W. Sapcote & Sons, contractors, from plans prepared by Mr. R. E. Edmonds, C.E., of Colmore Row, Birmingham.

ALTERATIONS are to be made to the old Infirmary and Infectious Hospital at the Dewsbury Workhouse, at a cost of not exceeding £2,000.

THE Vestry of Hammersmith propose to pave with Jarrah wood, Goldhawk Road, Queen Street and Fulham Palace Road, at a cost of £22,000.

The Builders' Journal
COMPETITIONS.

No. 4.—A Village Church.

Designs are required for a Village Church to seat 200 people. The site is a hill-side, rising one in twenty from North to South, and situate in a stone country. The cost is not to exceed £2,500. Drawings to be submitted on or before Monday the 22nd of July.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS and SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

THE Eastbourne Corporation invites tenders for a cast iron curb, of the outside diameter of 35 feet, 1,000 tons of Portland cement, and 6,000 to 7,000 tons of cast iron pipes. Tenders should be sent in by July 22nd.

FOR the erection of a handsome and commodious Wesleyan Chapel in Palace Avenue, Paignton, the tender of Mr. Lammacroft, Dawlish, at £1,893 10s., has been accepted.

MR. J. M. BARRIE's article, under the title of "Old School Re-visited," written for the American Press, is to be illustrated with interior and exterior views of the Dumfries Academy, at which he was educated.

A NEW Baptist Chapel has been opened in the village of Trull. The edifice, a very pretty one of brick, with Bath stone dressings, has been built at the expense of Mr. T. Penny, of Taunton, the cost of furnishing being defrayed by subscription.

THE new English Church of St. James the Apostle, at Grindelwald, will be opened on July 25th.

Trade and Commerce.

The Glasgow Harbour Tunnel, which passes under the Clyde at Stobcross, was opened last week. The tunnel connects Mavisbank Quay, on the south side, with Finnieston and Stobcross Quays, on the north side, and consists of three tunnels, 16 feet in diameter, the side ones for vehicular traffic, and that in the centre for the passage on foot. The approach on either side is by a circular shaft, 80 feet in diameter, in which are operated the hydraulic hoists, raising and lowering the vehicles as they leave or enter the tunnels. The shafts are formed of cast iron segments, and lined with brickwork. The tunnels themselves are also lined with cast-iron segments, filled in with concrete and lined with glazed brick, presenting a particularly neat and pleasing appearance. All the tunnels were driven by means of shields and compressed air. The outer skin of the segments was coated by "grafting" with Arden lime, blown through a hole in the lining by air pressure. Each shaft contains six divisions for as many lifts, half being devoted to ascending to half of descending traffic. The maximum weight allowed for is about five tons, and the speed about 4 feet per second.

Power to determine Building Line.—Allen and Another v. London County Council.—In the Queen's Division, Mr. Justice Wills and Mr. Justice Wright heard a special case stated by a Metropolitan magistrate, who had made an order for the demolition of a certain building in the Metropolis as being beyond the building line. The question raised was whether the decision of the Architect as to the building being beyond the building line was conclusive and binding on the magistrate. A complaint had been made to the magistrate by the London County Council that the appellants began to erect a building beyond the general line of buildings on the north-western side of Birchington Road, Kilburn, without the consent of the County Council, contrary to section 75 of the Metropolis Management Act, 25 and 26 Vic., c. 102. The appellants, on November 13th, 1894, began to build four shops and houses upon the land at the corner of Birchington Road, Kilburn High Road, having a frontage of 22 ft. to Kilburn High Road, and 58 ft. to Birchington Road. This front in Birchington Road extended 16 ft. beyond the general line of buildings, as determined by the certificate of the Superintending Architect of the London County Council, who stated in it that the main fronts of the buildings in a certain row of houses formed the general line of buildings on the north-western side of Birchington Road, "in which road the building in question is situate, and the building in question would project beyond the prolongation of the said general line." It was contended on behalf of the appellant that the Architect had not by his certificate found that the building was situate in the "street, place, or row of houses" described as the north-western side of Birchington Road, and if he had so found, he had placed the building in a "street, place, or row of houses" in which the same was not situate. The respondents contended before the magistrate, that the certificate had determined that the building was situate in Birchington Road, and that such determination was binding on the magistrate. The magistrate adopted this

view on the authority of the case "London County Council v. Cross," and directed the demolition of so much of the building as was beyond the line. The question for the Court was whether the certificate showed that the house in question was situate in the street, place, or row of houses on and for which the general line of buildings was determined; whether it was the duty of the Architect to decide and find the situation of the appellants' building, and, if so, whether his decision was binding on the magistrate. The Court decided in favour of the London County Council, and gave judgment accordingly. Mr. Justice Wills said the question raised was whether the certificate of the Superintending Architect of the London County Council, who now represented the Metropolitan Board of Works under the Metropolis Management Act of 1862, deciding whether a particular building to which the building line applied in a street was decisive of the point in dispute. Looking at the Act apart from the authorities, the learned Judge would have thought that the tribunal which should decide that was the magistrate. But the matter had been much discussed both in the Divisional Court and in the House of Lords. It could not be said that the authorities were satisfactory. In 1886, in the case of "Barlow v. Vestry of St. Mary Abbott's, Kensington," Lord Watson held, without hesitation, that the Architect was the person to decide, while Lord Bramwell equally unhesitatingly held it was the magistrate. Lord FitzGerald agreed with Lord Watson. The majority of those learned Lords, therefore, were against the view that the magistrate was the deciding tribunal. The point also came before the Divisional Court in "London County Council v. Cross," where Mr. Justice Denman and Mr. Justice A. L. Smith both adopted the view that the Architect was the person. It was true that the case was subsequently overruled on another point, and, therefore, could not be called a binding judgment; but it seemed better to follow the views of this majority of Judges rather than to set up his own opinion. The point was not so important as it might seem, because the London Act of 1894 had made provision for the appointment of a tribunal of appeal against the Architect. On the second question the Architect must be taken as meaning to decide and determining that the building in question was in the street to which the building line

applied. Mr. Justice Wright, solely in deference to the judgment of the other Judges, concurred. Mr. Wedderburn, on behalf of the appellants, asked for leave to appeal if leave were necessary. This was granted.

Extension of the Tudhoe Iron Works.—The Directors of the Weardale Iron and Coal Company, in London, on Tuesday, decided to lay down new and larger rolling mills at a cost of £120,000.

Nettlefold's, Limited.—The sixteenth meeting of shareholders of Nettlefold's, Limited, was held at the Queen's Hotel, Birmingham. Mr. J. A. Kenrick, the chairman, said in moving the adoption of the annual report, that he wished to state that for the recreation of the employes they had a Club and Institute building, which had a Library containing 352 volumes. At King's Norton they had a very prettily laid-out Recreation Ground, to which a small addition had been made during the past year, and this was highly appreciated. Turning to the report, the result of the year's trading was a profit of £99,596 16s. 8d., and to this had to be added the amount brought forward, £38,032 17s. 9d., making a total of £137,629 14s. 5d. After paying the interim dividend and the interest on the preference shares, there remained £111,554 14s. 5d. Of that, £1,500 would go in directors' remuneration, and it was proposed to place to the reserve fund £25,000, and to the depreciation account £25,000, and to carry forward £12,979 14s. 5d., the amount placed to the depreciation account being practically taken, as he then foreshadowed, from the large amount carried forward last year. Then they would require £5,000 for interest on the preference shares, and they proposed to pay on the ordinary shares a dividend of 10s. per share, with a bonus of 10s., making practically 15 per cent. for the year.—The report was unanimously adopted.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BOWYDD, BLAENAU FESTINIOG.—Accepted for lecture room and minister's and caretaker's houses. Owen Morris Roberts and Son, architects:—

Pugh, John, Blaenau Festiniog ... £1,835 0 0

JOHN BENNETT, 32, Guilford Street, London, W.C.
GRANITE, MARBLE, MOSAIC & TILE WORK OF EVERY DESCRIPTION.
ESTIMATES AND DESIGNS FREE.
WORKS: 1, 19 & 20, BRUNSWICK MEWS, W.C.

METAL CASEMENTS of every description. GLASS ROOFING Shelley & Co's & Hopes Patents	HENRY HOPE 55 LIONEL ST. BIRMINGHAM LONDON 15 King-Sr Cheapside. MAN— -CHESTER 8 Exchange Arcade.
---	--

BRICKS 2½ or 3 inch **PRESSED BRICKS**
 Cheaper & Better than **STOCKS**.

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
 Low Quotations for Truck Loads of Three thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
 Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
 Telegraphic Address:—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO
TILES MOSAIC
FAIENCE
Poole Dorset

ROBT. ADAMS, 67, Newington Causeway, London, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self Compensating

SPRING HINGES

Guaranteed to last
longer and work better
than any hitherto
made.
CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to and
closes from the angle
of 135°

Fig. 3 is the new
Single Action Spring.
It opens to and closes
from the angle of 180°
i.e., "wide back."

THE FIRST
SPRINGS EVER
PRODUCED WITH
THESE GREAT
ADVANTAGES.

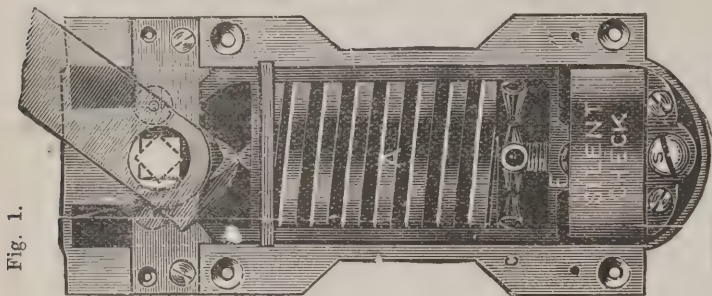


Fig. 1.

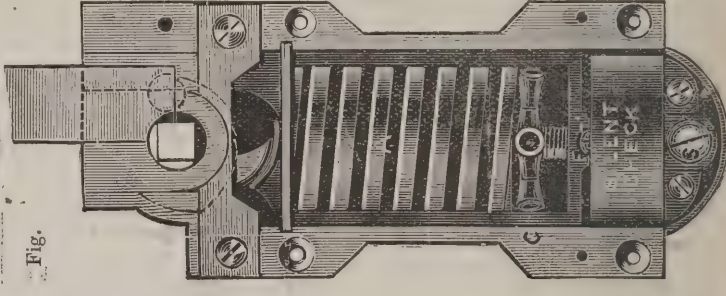


Fig. 3.

BURGHFIELD.—For studio at Burghfield for Mr. James Dave. Mr. J. S. Dodd, architect, Reading:—
Goodchild £237 0 0

COLCHESTER.—Proposed shop and premises at No. 4, Wyre-street, for Mr. S. Balls, of 40, Salisbury-road, Colchester:—

Near Colchester	£1,130 0 0
West, E., Chelmsford	867 0 0
Dupont, F., Colchester	825 0 0
Beaumont, R., Lenden	816 0 0
Chambers, W., Colchester (accepted)	759 0 0

DEPTFORD.—For new factory, Grove-street, Deptford, for Messrs. A. G. Scott and Co., Ltd. Messrs. Tolley and Son, 20, Budge-row, Cannon-street, E.C., architects. Quantities by Mr. F. H. A. Hardcastle, 5, Old Queen-street, Westminster, S.W.:—

	Scheme 1.	Scheme 2.	Scheme 3.
Waddington and Co.	£1,725 0	£3,493	£2,335 10
Gould and Brand	1,690 0	3,448	2,256 0
Bulled and Co.	1,690 0	3,420	2,208 0
Leney, H.	1,655 10	3,347	2,214 0
Falkner, J. W.	1,633 0	3,316	2,196 0
Carmichael, J.	1,615 0	3,290	2,162 0
Munday and Son	1,612 0	3,290	2,171 0

FARNBOROUGH (HANTS).—For new dining room, &c., Duns-cottage, for Col. Doring. Mr. W. E. Trevena, architect, Farnborough:—

Smith, Farnborough	£530 0 0
Murrell, Blackwater	475 10 0
Kemp, Frimley	473 0 0
Mundy, Basingstoke (accepted)	435 0 0

HARWICH.—For the erection of schools, cookery kitchen, boundary walls, playgrounds, &c., and closets, &c., on the main road, for the Harwich School Board, Essex. Mr. J. W. Start, F.S.I., architect, Colchester, Clacton-on-Sea, and Harwich. Quantities by the architect:—

	Alternative estimates.	Stone	Dressing.
	Total.		
Wawman, Mr., Felixstowe	£7,194 0 0	£175	
Dobson, G., Colchester	6,880 0 0	190	
Gladwell, H., Walton-on-N.	6,786 11 3	99	
Smith & Beaumont, Harwich	6,744 16 0	135	
Moran, J., & Son, Harwich	6,690 0 0	125	
West, E., Chelmsford	6,676 9 9	272	
Everett and Son, Colchester	6,590 0 0	180	
Girling and Coe, Ipswich	6,469 0 0	210	
Dupont, F., Colchester	6,435 0 0	125	
Brown, J., Braintree	6,420 0 0	135	
Parmenter, S., Braintree	6,319 0 0	139	
Saunders, E., Dovercourt	5,972 6 0	272	

HAVANT.—For new dairy, factory, stabling, &c., for the Belgravia Dairy Co., Ltd. (head office, 2, Exhibition-road, South Kensington). Mr. A. Edwin Stallard, F.S.I., architect. Quantities by the architect:—

Staples, J., Havant	£2,450 0 0
Edwards, J., Waterlooville	2,425 0 0
Perkins, J. W., Southsea	2,400 0 0
Peters and Son, Horsham	2,390 0 0
Hall, T. P., Southsea (accepted)	2,363 0 0

KENNINGTON, S.E.—For the erection of three temporary iron buildings on the site of the new school, Kennington-road, to provide accommodation for 800 children, for the London School Board:—

Shaw, M. T., and Co.	£1,892 10 0
Charteris, D.	1,665 0 0
Dixon, I., and Co.	1,506 12 0
Morton, F., and Co., Ltd.	1,489 17 6
Lysaght, J., Ltd.	1,470 0 0
Cruwys, T.	1,400 0 0
Croghan and Co., Ltd.	1,375 0 0
Keay, E. C., and J., Ltd.	1,358 11 0
Harbrow, W.	1,321 0 0
Hill and Smith, Brierley, Staffs.*	1,300 0 0

*Accepted.

LANDRYNMAIR (MONTGOMERYSHIRE).—Alteration and addition to the C. M. Chapel, Messrs. Owen Morris Roberts and Son, architects, Portmadoc:—

Evans, Evan, Cemmaes (Mont.)	£900 0 0
Phillips, Evan, Newtown (Mont.)	830 0 0
Williams, E. H., Llanbrynmair*	826 0 0

* Accepted.

LANDRINDOD WELLS (RADNORSHIRE).—Accepted for additions to Pantycelyn. Messrs. Owen Morris Roberts and Son, architects, Portmadoc:—

Morris, E. F., Landrindod Wells	£230 0 0
--	----------

LONDON.—For the erection of a dwelling-house and shop, White Post-lane, East Ham, E. Mr. Fred. A. Ashton, 3, Crooked-lane, E.C., architect:—
Hearle and Farrow £1,294 0 0
Watson, W. * 1,125 0 0
* Accepted.

LONDON.—For the erection of a new choir vestry to St. Saviour's Church, Walton-place, Upper Chelsea, S.W. Messrs. E. Geldart and J. Randall Vining, of 89, Chancery-lane, W.C., joint architects:—
Foster and Dicksee £330 0 0

PAIGNTON.—For erecting and completing Paignton Wesleyan Chapel in Palace-avenue, for the Trustees. Mr. Walter George Coudrey, of Paignton, architect. Quantities by Mr. Vincent Cattermole Brown, of Paignton:—

Webber and Maunders, Paignton	£2,270 15 0
Webber, H., and Son, Paignton	2,229 10 0
Drew, C. and R. E., Paignton	2,180 0 0
Rabbich, H. P., Paignton	2,126 0 0
Yeo, R., Torquay	2,014 0 0
Bridgman, M., Paignton	2,011 14 6
Bovey, Torquay	1,995 0 0
Blatchford, Torquay	1,991 12 0
Lamaeraft, Dawlish*	1,893 10 0

* Accepted.

PANGBOURNE.—For alterations to post office, Pangbourne, for Mr. Clifford. Mr. J. S. Dodd, architect, Reading.

Bottrill and Son	£390 0 0
Boxall	367 0 0
Warner	349 0 0
Goodall *	321 19 0

* Accepted.

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. B. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,
59 & 60, CHANCERY LANE, LONDON, W.C.
N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

ESTABLISHED 1866.

J. J. ETRIDGE, Jr. SLATE MERCHANT, SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part
of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate
delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

PENCAENEWYDD, CHWILOG (CARNARVONSHIRE).—Two cottages. Messrs. Owen Morris Roberts and Son, architects, Portmadoc:—

J. Jones, W. R. Jones and S. Roberts, Pwllheli	£493 0 0
Pierce, John, Pencae Newydd*	376 0 0
Roberts, Griffith, Penygraes	365 0 0
Williams, Robert, Pwllheli	297 0 0
Roberts, John, Pwllheli	290 0 0

* Accepted.

PENTREFELIN (TREMADOC).—Cedron C. M. Chapel. Alterations. Messrs. Owen Morris Roberts & Son, architects:—

Williams, D. M., Criccieth	£262 0 0
Williams, Robert, Pwllheli	227 9 0
Roberts, R., Criccieth	216 10 0
Jones, Wm., Portmadoc	118 0 0
Jones, Richard, Twrog Mills, Llanwnda*	179 0 0

* Accepted.

RETTFORD.—For the erection of public baths for the Corporation. Mr. J. D. Kennedy, borough surveyor. Quantities by Mr. F. Cartwright, 25, Figtreet-lane, Sheffield:—

Ives, W., and Co., Shipley	£2,693 13 10
Astling, Thos., Sheffield	2,574 14 6
Webster, Geo., Sheffield	2,440 0 0
Baines, Chas., Newark	2,419 10 6
Nicholson, W., and Sons, Leeds	2,341 0 0
Price, J. F., Nottingham	2,250 0 0
Vickers, J. H., Nottingham	2,239 0 0
Johnson, Wm., Doncaster	2,217 0 0
Pattinson, F., Ruskington	2,159 0 0
Wilson, J., West Retford (accepted)	2,120 0 0

Accepted for the engineering work, Moorwood, Sheffield, and Co. of Sheffield, and 9, Southampton-row, High Holborn, W.C.

RHIF, BLAENAU FESTINIOG (MERIONETHSHIRE).—Accepted for ministers manse for C. M. Chapel. Messrs. Owen Morris Roberts and Son, architects, Portmadoc:—
Roberts, Griffith, Blaenau Festiniog £609 9 0

ROY BRIDGE.—The following tenders for Mr. MacDonald's villa, have been let. Mr. Woulfe Brennan, architect, Oban:—
Masons, Messrs. J. Adam and Co., Glasgow.
Joiners, Messrs. J. and A. McDougall, Oban.
Slaters, Messrs. Cattannach, Newtonmore.

Plumbers, Messrs. Anderson and Nisbet, Glasgow and Oban.
Painter, Mr. A. L. Gray Oban and Fort William.

SNODLAND, ROCHESTER.—For the erection of cemetery buildings, for the parish council. Mr. H. Bensted, Maidstone, architect:—

Norman, E.	£1,370 14 7
Brown, E. G., Halling	1,330 10 0
Cox, Maidstone	1,325 0 0
Wilford, J.	1,310 0 0
Wood, J., and Son, Maidstone	1,296 0 0
Langridge, R.	1,247 0 0

(Plans to be modified, and fresh tenders invited.)

STRATFORD, E.—For pulling down old shop, No. 74 Broadway, Stratford, and erecting new premises for J. R. Roberts' Stores, Limited. Mr. J. Kingwell Cole, architect, 17, Hart-street, Bloomsbury-square, W.C.:—

	Extra for lead flats.	Extra for teak stairs.
Reed, A., and Sons	£3,998	£71
Bywaters, G. H. and A.	2,973	69
Harris and Wardrop	2,893	65
Bishop and Webb	2,855	70
Wall, H. and Co.	2,830	68
Goody, E.	2,707	not given
Osborn, T., and Sons*	2,750	inclusive of extras.

* Accepted.

STREATLEY.—For the erection of house at Streatley for J. Juckey, Esq. Mr. J. S. Dodd, architect, Reading:—
Mr. Thos. Higgs.

SPHINCTER WORKS,
EMERSON STREET, LONDON, S.E.,
MANUFACTURERS OF
LECLANCHE BATTERIES, TELEPHONES,
ELECTRICAL THERMOGRAPHS,
WATER TELEGRAPHS, and COMPLEX
COMMUNICATIONS of all kinds.

The Builders' Journal.

Vol. I., No. 23.

Tues., July 16, 1895.

ILLUSTRATIONS.

"Rhinefield" from the Roofs:
Messrs. Romaine-Walker & Tanner, Architects 353
Coventry Municipal Buildings:
The First Premiated Design 355
Coventry Municipal Buildings:
Interior of the Council Chamber 356
Coventry Municipal Buildings:
Fire Brigade Station and Police Entrance in
Hay Lane..... 357

The Great Hall of "Rhinefield":
By Messrs. Romaine-Walker & Tanner, Architects 359
"Rhinefield," the Terrace Front:
Messrs. Romaine-Walker & Tanner, Architects 360
The Great Organ at Blenheim Palace:
Designed by Mr. Romaine-Walker 361
Tintern Abbey: The West Window of South Aisle 363

CONTENTS.

Removing a Stigma 353
The Cathedral of South London 353
The Craftsman Class..... 354
Stone and Sand 354
Coventry Municipal Buildings Competi-
tion: A Criticism 354
Bricks and Mortar..... 356

Men who Build, No. 21.—
Mr. Romaine-Walker 360
The Destruction of Edinburgh: Letters
from Mr. James Brooks, Mr. William
Young, and others..... 362
Design in its Decorative Aspect: A Bir-
mingham Exhibition..... 363
British Students at Athens 364

An Ancient Caledonian Hill Fort: Build-
ing before the Lime Period..... 364
Indian Art at Earl's Court 365
An Old-World Essex Borough 365
My Journey to Athens..... 365
Professional Items..... 366
Society Meetings 367
Trade and Commerce 368

Removing a Stigma. THE action of the Prince of Wales in calling attention to the emaciated finance of the British School at Athens was singularly opportune. It is one of the unpleasant paradoxes in which our nation unwillingly indulges, that while we still inculcate in our Public Schools and Universities a love of Latin and of Greek, and cultivate the regard and reverence of Classic achievement and tradition, we allow ourselves to be outstripped in the race of research by Germany, by America, and by France. We talk of Athena, worship her, but do not seek out her Temples. It is so simple to take even the Parthenon for granted, as if it were part of a stock at a valuation. The love of Greek Form, Greek Literature, and Greek Art is lapsing in the land; the Spirit of Commercialism—a mental Juggernaut—is rolling the Dead Languages to dust, and Archæology alone may remain to interest us in the ruins and remains of a great and glorious Past. For this reason, granting that we Moderns have to lose our acquaintance with the Greek language, it is essential that we should have a band of devoted scholars and students willing to garner for us what there is yet to learn in these Classic Cities of dead Empires; Empires where Man worked in his Might. It is only by perpetuating this love for Classic record and literature that we can again attain to or even approach the breadth and power of the Homeric line; or the austerity and imperishableness of the Greek Column. Architects and Archæologists are directly interested in this spirited attempt to revivify the British School at Athens. We have been following too closely in the later footsteps of Greece; poor and impoverished, the British School has been struggling on, with its

timid income of £500 a year, and its envious eyes at the German and French Schools which dig to the tune of generous thousands per annum. No wonder that at Delphi, at Olympia, we have been outrivalled. On the slopes of the Acropolis British scholars have worked under disheartening conditions, while the Foreign Schools have made discovery upon discovery, to the amazement and the appreciation of the World. It is time, it is high time, this was ended. A wealthy nation like our own, with its con-

the Prince having thrown all his influence into the scale, we shall soon learn that Mr. Penrose's building at Athens is all too small for the savants and the students who will flock thither in England's name. One of the most valued experiences a clever young Architect can have is a six months' course of study of Greek Art—in Greece.

The Cathedral of South London. WE have been requested to point out the claims of St. Mary Overy, Southwark, now undergoing restoration. There is, surely, little need to extol here what is admittedly the finest mediæval building in London, excepting, of course, Westminster Abbey. In our last issue we gave an engraving of the interior, from a sketch by Mr. Burke Downing. St. Mary is a shrine for all Architects, and we should be prone to commiserate the professional man who had not studied its wonderfully sedate and restful lines. Visitors to London, however, do the round of the Churches north of the river and very frequently forget or overlook this magnificent Southwark Church. For their benefit and direction we might remind them that St. Mary Overy has memories and records of Gower, Father of English Poetry, who was interred within its walls in the first decade of the fifteenth century. Two hundred years later, William Shakespeare's brother Edmund, "a Player, was buried in ye Church with a fore noon knell of the great bell." Fletcher and Massinger lie under its roof; Henstowe, one of the first Theatre Managers of fame in London, is buried here; Alleyn, too, actor colleague of Shakespeare, was connected with the Parish as Warden. It is intended that the Church shall become, in all but name, and possibly in name also, the Cathedral for South



"RHINEFIELD" FROM THE ROOFS: ROMAINE-WALKER AND TANNER, ARCHITECTS.

vincing Museums to prove what search can do, what earnest study has done, should remove this stigma of dilatoriness; should arouse enthusiasm for the British Schools and Exploring Parties in the East. We cannot—mere *amour propre*, if nothing else, would forbid it—permit the prizes to be won again and again by the scientific persistence of Germany or the ardent enterprise of the French. The re-modelling of the British School at Athens has begun in the right place; the movement comes from the top, and we have every reason to believe that,

London. South London is in the diocese of Rochester. Up to the present £33,000 has been spent, but another £17,000 is needed. As the work goes forward, it is more and more apparent how much St. Mary Overy is worthy careful and complete restoration.

The Craftsman Class.

THE attempt on the part of the Council of the Institute to bring the general body of its members into closer touch with Craftsmen by instituting a new Class, was discussed at its special meeting last week, and eventually adjourned until next session. It was just that so wise a measure, as this will undoubtedly prove to be, should not be hustled through at the fag end of the session when everybody is dreaming of a little rest from labour and toil. But an adjournment of this kind is apt to cool the energies of promoters, and it is greatly to be hoped that the men who are responsible for it will simply look upon delay as an opportunity to gather further arguments in favour of their scheme. Opposition is sure to exist. Nothing much is worth having that cannot be opposed on fairly reasonable grounds; but when all is said and done, it will be found that the "Profession" and the "Art" of Architecture, as represented by the Royal Institute of British Architects, has nothing to fear by a closer alliance with the reputable craftsmen of the country. If nothing, however, is to be attempted but the mere formation of another section of members who, on the payment of a substantial yearly subscription, are permitted to walk up and listen to a deadly dull paper upon the recent discovery of a prehistoric toothpick in Timbuctoo, then there would be just as much reason and as much benefit to Architecture, if there were no restrictions whatever as to membership. But we understand that the innovation is the beginning of bigger things, and as such we shall welcome it—ere its opponents have meddled and muddled with it—as the first spark of real effort the Institute has shown for years.

Stone and Sand.

LABOUR, Building Labour this time, had its little joke at Brighton on Sunday, and the Sabbath was more than usually disturbed—even for Brighton. It seems that the Brighton Building Trades' Federation had got to celebrate itself somehow, and from the way it conducted itself we can well believe that it *was* its first anniversary! By and by, when the Federation has grown its corner teeth, it will cease from mixing politics with its bricks and mortar. For the moment the temptation—with the Election pending—was too great. The brass bands and general *ensemble*, and broad good humour ended in a considerable amount of recrimination and a bad attack of virtuous indignation. We still hope that sermons in stone can be builded without the common clap-trap of party-strife, and we should be sorry to think that the Art of Building began to base itself upon the shifty sands of clever politicians. Federation, within the well demarked bounds of common sense, is all very well, but Party frenzy, either way, may be well left alone. For this reason we deprecate and regret that the Federated Artisans of Brighton found time to quarrel on Sunday, when all should have been amity, brotherhood—and British ale. Mr. Dew, who indeed fell upon the company "gentle from heaven," was nearer right than wrong when he exclaimed to his fellow-workers: "A plague on both your parties!" Let us keep to our building; the cobbler to his last, and the controversialist to the nearest orange box he can find in the political pell-mell.

COVENTRY MUNICIPAL BUILDINGS COMPETITION.

A CRITICISM.

THE City of Coventry has done so much in the past for Architecture, and has still such a wealth of beautiful work left to instruct and to delight all lovers of Art, that she deserves the very best that the Architectural genius of the country can give. But we doubt much if the Corporation of Coventry has set to work in the best way. What particular reason there was to have limited the recent Competition to some eight or nine men, is not quite clear, but the interests of Architecture and the historic City itself would have been best served by having a Preliminary Open Competition and a second limited to the best dozen of the first. As it is, one left the Exhibition of the Drawings at the School of Art with the uneasy feeling that Architecture in this case—able as the majority of the drawings undoubtedly are—has again not had a chance of doing her best.

The interest of the problem was focussed in the beautiful Hall of St. Mary, alone worth a visit to Coventry. It is situated opposite the south side of St. Michael's Church in Bailey Lane, and it is on the ground around the old Hall that the new Municipal Buildings are proposed to be built. The site extends about 70 ft. eastwards from the old work in Bailey Lane and about 280 ft. from the angle there in St. Mary Street to the principal front (about 80 ft.) in Earl Street. There is also another piece of ground west of St. Mary's Hall, with a frontage of 80 ft. in Hay Lane and a depth of 140 ft., or so, to the west side of the Hall. The depth of the St. Mary Street frontage is only about 70 ft. It will be seen from this that the site is a somewhat complicated and restricted one, and it is generally agreed that a great opportunity has been lost by the Corporation in not acquiring the Baptist Chapel at the corner of Hay Lane and Bailey Lane; the extra space would have been invaluable for the plan, cramped as it is, and it would have almost made this portion of the City architecturally complete. The key to the proper disposal of the new buildings was of course to be found in the old work, and the only designs which harmonised in any way with St. Mary's Hall were those under mottoes "Red Crescent," "Mighty Maze but not without a plan," and "Leofric the Saxon," the first premiated.

The conditions, which gave little or no information or restrictions as to sizes of the different rooms and no stipulated sum for the outlay, asked for the following accommodation:—City Council Chamber, Mayor's Parlour, and Offices of the Town Clerk, City Accountant and Surveyor, Weights and Measures Offices, Gas and Waterworks Department and Health Offices, the City Police Court, Magistrates Room and Offices, accommodation for City Police, Fire Brigade Station and Caretaker's Room and "such other rooms as competitors thought necessary." There was a very important clause referring to ancient lights, but no information concerning them given, and another important item was the desire of the Corporation that the work should be so designed as to be easily erected in blocks, the Police Department being the first proposed to be built.

The First Premiated Design, "Leofric the Saxon," is simple and easily read in the main lines; a long, straight Corridor extends the whole length of the St. Mary Street Front, connecting the Main Entrance in Earl Street with the Council Chamber, which is placed on the first floor at the angle of Bailey Lane. The Police Court is on the ground floor next the Entrance Hall, with a special entrance in the centre of the St. Mary Street Façade. The Entrance for the Council Chamber is the old one in Bailey Lane, through the finely groined fifteenth century gateway that has been used for ages, and all this portion of the new work is placed *en suite* with St. Mary's Hall, excellently for civic festivities, &c., and, moreover, is upon the quietest portion of the site. The Fire Brigade occupies the Hay Lane Front, a distinguishing feature externally, in which is the long narrow niche for the fire escape. The Police Cells and accommodation are placed in a half basement under the Police Court, the Parade Room and Caretaker being at the north

angle of St. Mary Street. There are several points in detail of the arrangement of the basement which need be re-considered, the planning of the Housekeeper and Constables' Apartments is not very good. On the ground floor from the Earl Street Entrance is a spacious Entrance Hall, the main staircase being on the left hand, with access to the Mayor's Private Room and Police Court beneath. On the right, at the angle, is the Medical Officer of Health, and the Chief Constable's Room. Witnesses, Solicitors, &c., in connection with the Police Court, are all on the right hand side of the Corridor and face St. Mary Street, the Weights and Measures and Gas Departments being at the Bailey Lane end of the same street. On the first floor, over the Entrance, is planned the Water Department, with the City Accountant at the angle of Earl Street. The City Surveyor has his Public and Private Offices, facing St. Mary Street, with the General Drawing Office in a quiet position at the back and a north light. The Town Clerk's Offices are next in the Corridor and are all well lighted to the street.

Externally, the principal feature is a low square angle Tower, next the Main Entrance, which, in the perspective, composes well with that of St. Michael's and Holy Trinity in the background. The whole design is modelled, more or less, on the type of St. Mary's Hall, and the best part is the way in which the new work of the Council Chamber, &c., in Bailey Lane, is grafted on to the old. The Front to St. Mary Street is simple and well-balanced, and shows a study of some of the Oxford Colleges. It could be brought into a more harmonious relation with the principal Front; as it is, the two seem a little disconnected, and the Tower is a trifle too large in scale for the rest of the design, and needs binding to the Fronts a little more. The continuity of the lines in St. Mary Street is broken at this angle, which is unquestionably a mistake, and could very easily be remedied.

Mr. Hare well deserves the second place with his set under motto, "Red Crescent." His plan is admirable in distribution of parts, although a mistake is made in placing the Council Chamber away from the Old Hall, and longitudinally to the Principal Front at the angle of Earl Street and St. Mary Street. The Fire Brigade occupies the other angle in Bailey Lane, and the whole of the Police accommodation is in Hay Lane, the Police and Fire Brigade Drill Yard being at the back of the St. Mary Street Front, the continuity of the plan on this side is seriously interfered with by the Archway to Drill Yard. There is no way of communication with the old part on the ground floor without coming into the street, a defect which, however, could be easily remedied. The Municipal Offices are well planned, the principal Entrance is in Earl Street; the Gas Department occupies the left hand on entering, and the City Accountant the right at the angle of St. Mary Street. The Medical Officer is between the latter and the Fire Brigade. The Borough Surveyor and Town Clerk are on the first floor, the latter at the Bailey Lane angle. One point in which the first premiated design scores over this, and most of the others, is in the large amount of space obtained around the back of the Old Hall. Mr. Hare's plan is a little crowded at this part, which, for the sake of the ancient lights and for light and air generally, is a somewhat serious defect. The elevations, designed in a most sympathetic type of Late Gothic, and excellently drawn, are quite in keeping with the old work and yet have a character of their own. The elevation of Police Court to Hay Lane is a particularly happy, well-balanced, and thoughtful piece of work. The three gables and the projecting oriels on the first floor, and the square-headed, severely treated entrance, are all well expressive of the purpose of this part of the building.

We like Mr. Hare's alternate design in Jacobean, by itself, better than the Gothic Front to Earl Street, although it is not, of course, quite so much in character with the old work; but it is quieter and has rather more repose than the other. The Front to St. Mary Street is not so successful as other parts, and its repose is rather needlessly disturbed by the centre gable; it would have gained much in breadth at this point if the straight lines of the

parapet had been unbroken. The design, however, as a whole is most able and well deserved second place, and shows to much advantage in Mr. Raffles Davison's pen drawing.

The set of drawings which, in our opinion should have received third place, if not something better, is that under the motto: "A mighty maze but not without a plan" (by Messrs. Unsworth and Newberry). It is one of the best designs we have seen for some time. The Architecture is founded on a quiet type of Renaissance with Gothic feeling, and the whole design is quite in harmony with St. Mary's Hall. The elevation to St. Mary Street is a most delightful and happy composition, inspired doubtless, by St. John's College, Oxford, but with much individuality of its own; the long lines, broken only by the three projecting oriels on the first floor, with much plain wall surface

almost identical with the first premiated), the City Accountant, with the Gas Show Room and Gas Offices at the angle of Bailey Lane and St. Mary Street; the Fire Brigade is midway between, with an entrance in St. Mary Street. The whole of the Police Court accommodation is obtained in Hay Lane, which, if it were not that it relegates the Fire Brigade to St. Mary Street, is a good point. The Police Drill Yard and Parade Room occupy the remaining space up to the old Hall and are well planned in relation to it. The cloister-like Corridor connecting this part with the other buildings is a capital feature. The Council Chamber is placed on the first floor, and at the back of the St. Mary Street Front and at right angles to it, about midway between Bailey Lane and Earl Street. The Mayor's Parlour and Committee Room, &c., occupy the opposite angle and the

minor arrangements in the main building, but the plan in its principal lines is not so good as the other three just mentioned, and the difficulty of the blending of the old and new work is not very happily met. There is, however, much ability evident in the whole design as might be expected of these well-known artists. The perspective (a pen drawing) shows the Principal Entrance in Earl Street and is rather roughly drawn but strong and effective nevertheless.

The remaining drawings do not call for any special remark, with the exception perhaps of "Advance," the third premiated design, which has good points in plan. The Grand Corridor, 22 feet wide! on each floor is a very good idea for a less cramped site, but here, where the ground is so valuable, it is far too wasteful an arrangement, and moreover unnecessarily re-



COVENTRY MUNICIPAL BUILDINGS—THE FIRST PREMIATED DESIGNS.

VIEW SHOWING FRONTS TO EARL STREET AND ST. MARY STREET, THE SPIRES OF ST. MICHAEL AND HOLY TRINITY CHURCHES IN THE BACKGROUND.

between, cleverly obtained without sacrifice of light to the various rooms, are excellent; and the projecting turret at the Bailey Lane angle serves well to mark the corner, and balances with a similar but rather shorter turret at the other end. A capital detail in pencil shows a portion of the Principal Front to Earl Street with its fine feature of a recessed arcaded Entrance of five bays and an open Loggia over, on the first floor of three bays, showing also a liking for a certain little Manor D'Angon in Normandy. The plan is not quite so good as the first two, and for this reason may not have been placed. On the ground floor, entering from Earl Street are arranged the Medical Officer of Health and Weights and Measures on either side of the Principal Entrance, farther along the Corridor (which latter, in position on all floors, is curiously

Front to Bailey Lane, and are schemed, as in the first premiated design, to be used in connection with the old Hall.

The authors of "Lux" send a clever set of drawings, showing much ingenuity of plan, but the florid type of Gothic adopted is not quite worthy of men who do such excellent work as Messrs. Gibson and Russell. The design, however, shows to better advantage in the geometrical drawings than in the perspective; the somewhat unpleasant German character is less evident and appears far better adapted to the Gothic of the surrounding buildings. In plan a mistake is made in the placing of the Council Chamber and Police Court—the former takes the angle of St. Mary Street and Earl Street, whilst the latter is at the other extreme in Bailey Lane. The Fire Brigade is planned in Hay Lane, and here much ingenuity is shown as well as in

duces the area of important rooms. The Police Court is placed in Hay Lane, and the author does not propose to disturb the existing work in Bailey Lane (which is a pity, for the building is a disgrace to the City), and rebuilds the Fire Station almost in its present position in St. Mary Street. "Londin," by Messrs. Gordon & Wilkinson, has many excellent points in plan, but wasteful withal, and the elevations are in some parts commendable, notably the Bailey Lane Front, but unsuitable and out of harmony with the surroundings. The designs sent under mottoes "Experience" and "Experience A" shew good schemes in the planning, but the elevations, in a heavy type of Renaissance with Dutch features, show scanty respect or care for the old work "Fortis in arduis" and "Practical" are both designs which show little or no appreciation of the possibilities of the site.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
July 16th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

A COMMITTEE of friends and former pupils of the late Mr. Reginald Stuart Poole has been formed with the view of erecting some permanent memorial of him, and it has been decided to appeal for assistance from all those who have experienced the benefits of his teaching, help or encouragement. It is hoped that sufficient subscriptions may be received to provide for a life-sized portrait medallion, or possibly a bust, which might be placed in some building associated with his work.

FOR the suggested new Fountains in Manchester there are two main questions—the sites and the designs. The sites, when chosen, should influence the designs. One step has been taken, by the erection of full-sized models on the sites at present proposed. A second step in this direction should be the exhibition to the public of the drawings. From the models it is clear that both the Fountains in question are to be for drinking only. If the models at all fairly represent the designs, it must be confessed that it would be a misfortune were they carried into execution. They do not even convey to the mind what is properly meant by Design. The model in Portland Street, especially, suggests the piling up of granite, marble, or stone by one who has little knowledge of Architectural forms. The exhibition of the drawings would either go far to justify the choice of the design or would confirm this criticism upon the model. The model of the other Fountain, now at the corner of Oldham Road and Butler Street, is less open to criticism, as it is much smaller than the other, and much less ambitious and pretentious. But it does not appear to have been designed for that site.

THE house in Paris of the famous Sanson family, who were from generation to generation for so many years what the French grandiloquently call the Executors of High Works—in plain language, the public executioners—is, it is said, about to be demolished. The Sansons have a place in French history, not only because they continued so long to hold their odious office, but because two of their number, a father and son, held office during the evil days of the Reign of Terror, when they were kept so busily engaged with their guillotine. The last of the Sanson dynasty was dismissed from his post in the reign of Louis Philippe, in 1847, under remarkable circumstances. Although he had inherited a comfortable fortune from his father, the executioner of the Revolution, he got into pecuniary difficulties, and was guilty of pawning his guillotine, surely the most lugubrious pledge ever taken by mortal pawnbroker. An order came from the Procurator-General for the execution of a criminal, and the necessary apparatus was not forthcoming. The prison authorities had perforce to get it out of pawn, and the execution took place.

SIR GEORGE HAYTER'S historical picture of "The Trial of Queen Caroline," is to pass into the custody of the National Portrait Gallery. The picture is a large one, measuring 13 ft. 9 in. by 8 ft., and was painted for the first Lord

Dover. It is an heirloom, and so could not be included in the sale of the Clifden properties. The heads in the picture are nearly all portraits.

THE last stone has been placed in position on the top of the Central Spire of the Mitchell Tower of Marischal College, Aberdeen, and the mason work has reached its highest point. Arrangements have been made for the opening of the new Students' Union and the inauguration of the Graduation Hall and other gifts to the College and University by Dr. Mitchell, of Jesmond Towers, Newcastle. The contemplated arrangements provide for a celebration extending from Tuesday, the 22nd of October, to Friday, the 25th of the same month. Meanwhile, Dr. Mitchell has given another practical proof of his interest in the University extensions at Aberdeen. He has signified his intention of defraying the cost of laying the Picture Gallery with an oak floor similar to that of the adjoining Graduation Hall.

A MOST interesting book, particularly to Archæologists and Antiquarians, has just been published, entitled, "The Early History of the Town and Port of Hedon, in the East Riding of the County of York," of which Mr. J. R. Boyle, F.S.A., is the author. Hedon, a sleepy, Old World place, which we happen to know well, has, nowadays, a reputation to keep up—if nothing else. It is a port still, on the north bank of the Humber, older than Hull, dating from certainly soon after the Norman Conquest, and with a Church almost worthy to rank as a Cathedral, as far as proportions and beauty of structure go. The fame of Hedon was apparently short lived, for as early as 1206 its trade had largely passed over to its new rival Hull, which had had greater advantages of maritime commerce given to it, and had

consequently by that time paid to the Exchequer, in two years, more than five times the amount of duty that the already declining Hedon paid. By Henry II.'s reign, Hedon had, perhaps, attained its zenith, having the privileges of free burgage, its "gild merchant," and its hanse. In that reign, too, its beautiful Church of St. Augustine's—the only one remaining of its three ancient Churches—was built, in the churchyard of which a Grammar School was afterwards erected, with its top rooms or "camera," assigned afterwards to the schoolmaster at the moderate rent of 3s. per annum—a rent which he never paid—"only 3d. for the garden." History does not relate what the schoolmaster's income was, but if the figure was not in proportion to the rent the modern schoolmaster would look back with envy to the easy circumstances of pedagogues of the twelfth century. Many interesting relics of the past are noted in this history of Hedon. Its pillory, its ducking-stool at the brink of the town pond, the bull-baiting that took place on its market hill; its royal bakehouse where all for a time were compelled to bake their bread—all take us back to a past remote from our own days.

M. FELIX FAURE, President, has inaugurated at the Louvre the Hall of African Antiquities, which has been talked of for so long. It is near to the Gallery containing the bronzes executed by the founders of the Renaissance after the Antique. A part of the new Collection consists of the statues presented by the Bey of Tunis so long ago as 1852, but which for upwards of twenty years were lost. They were finally discovered in a lumber shed at Toulon, and when the Museum authorities claimed them the Marine Department refused to give them up, and a red-tape war ensued.



CEMALLOWS
95.

INTERIOR OF THE
COUNCIL
CHAMBER

COVENTRY MUNICIPAL BUILDINGS: THE COUNCIL CHAMBER.

THE Spire of St. John's Church, Bognor, the top stone of which is now in position, is constructed of Carsham Down stone, is octagonal, and has four brooches—at the east, west, north and south angles. From the top of the cornice to the sill of these windows is 8ft., the openings being 3ft. 6in. From the top of the cornice to the second windows, which are on the opposite angles, is 31ft. to sill, and to top of windows 43ft. From the top of these windows to the top of the stonework is 26ft., the full height of the Spire from the top of the cornice being 70ft. Surmounting this is a gilded Cross of ironwork 7ft. in height, which is fixed by an iron rod 16ft. 3in. passing downwards through a block of Portland cover stone 9in. thick, and weighing over a ton, the rod being bolted on the underside of the stone, and the cavity 6ft. through the stonework from the top for the rod to pass through being afterwards filled up with cement. From the base of the Spire to a distance upwards of 43ft. the stonework is 9in. in thickness, tapering off to a thickness of 8in. for a distance of 10ft. 8in., the remainder being solid to the summit, the top stone being of Portland stone 2ft. 7in. thick. The Spire was commenced on the 1st of April.

ONE of the New York financial papers makes the startling statement that "there are twenty well-built towns in Kansas without a single inhabitant to waken the echoes of their deserted streets." It is said that Saratoga, one of these deserted villages, has "a 300,000 dol. Opera House, a large brick Hotel, a 20,000 dol. School House, and a number of fine business houses, with nobody to claim even a place to sleep." All of this came about by booming on borrowed capital without resources enough to pay the interest.

GREAT pressure is being used by the Contractor of the new Sheffield Town Hall to hasten the work, and the building should be well completed before May next year. There are now 250 men employed in some twenty trades, under exceptionally favourable conditions as to weather and rapid progress. The bulk of the mosaic flooring and wall tiling has been completed in Surrey Street; the whole of the pitch-pine floors laid, and the greater part of the oak and pitch-pine joinery fixed. The lead and the plain glazing is virtually complete to the windows, and all iron casements are fixed. The wood block floors are being laid in the basement. The steps to Surrey Street Entrance, excepting those on the causeway, are in position; the Vestibule generally has but little needed to complete it. The Council Chamber ceiling is nearly completed, the stone carving there about done, while the wall dado for the same is being delivered. The plastering to Pinstone Street generally is being pushed forward, and the fibrous plaster ceilings for Reception Rooms, Accountant's and Water-works General Offices, are about to be fixed. The carving to principal stairs is finished, and the polished marble wall linings are being placed in position. The marble stair itself is partly fixed.

AN application to authorise the acquisition of land required for the purposes of an Electric Railway to the summit of Snaefell, the highest Manx mountain, has come before the Manx Legislature. Several members urged that the matter should be adjourned, in order that the question of public rights on the mountain might be inquired into and considered. It was stated that the public only ascended the mountain by permission of the proprietors, but this statement was disputed, and eventually the matter was referred to a committee. It is the intention to build an Observatory on the summit, but not otherwise to build on the mountain.

REGARDING the famous Roman Duct at Bath, a report has been presented by the two members who had been commissioned by the Committee to inspect the Duct, which has been explored for a distance of 300 ft. The exploration has been very interesting in itself, but the Mayor, in suggesting that the work should be stopped, was only giving the opinion of a good many other people. The report states that here and there, at irregular intervals, it is crossed transversely by massive horizontal stones or lintels, once by a pointed arch, and



COVENTRY MUNICIPAL BUILDINGS COMPETITION—FIRE BRIGADE STATION AND POLICE ENTRANCE IN HAY LANE.

twice by circular arches. At one point the walls are of very massive masonry, many of the blocks on their faces being 16 ft. by 3 ft. The roof is now so low that the explorer has to travel as best he may; indeed he has to crawl upon his knees, his candle in his hand, until he reaches the barrier of solid masonry which at present represents the end of his journey. The report concludes: "The absolute uncertainty of what may be the cost of following the Duct to its destination—the distance which separates us from the river—the consideration of the further cost of fitting it for permanent service, and guarding against silting up by the action of floods, lead your sub-committee to the conclusion that it cannot recommend any further expenditure upon this interesting discovery." The surveyor of works was, naturally, anxious that the undertaking should be further prosecuted, but it was agreed that the work of excavation should be stopped until the Council had considered the report. The Somerset Archaeological Society will be meeting in Bath at the end of July, and the Duct will be an interesting point for exploration.

THE place which the Duke of Fife is to build in succession to Mar Lodge is likely to be on a larger scale altogether. A faithful description of the Mar Lodge which the flames destroyed would be that it was a result of evolution from one thing to another. The new Mar Lodge will arise complete, will hardly be of wood from roof to roof, and it is practically settled will occupy a different site.

A MEMORIAL to the late Dean Elliot, in the shape of a recumbent figure has been placed in Bristol Cathedral. The cost has been £500, contributed by friends of the late Dean. The effigy is of the finest Parian marble of life size, and rests on a base of tinted marbles. The position is within the most eastern of the canopied recesses in the North Aisle of the Nave, close to the tablet already erected to the Dean's memory. Mr. Forsyth, the Sculptor, has earned a reputation by his success in similar works. Among these may be cited the follow-

ing: Bishop Parry (Canterbury Cathedral), Bishop Fraser (Manchester), Archbishop Magee (Peterborough), Bishop Claughton and the Earl of Dudley in Worcester Cathedral. The effigy represents the Dean as he was some twenty years ago or more, and before he became enfeebled by age.

MR. GEORGE ALLEN will publish early in the autumn season a book entitled "The Principles of Art according to John Ruskin," by Mr. W. White. The work is partly a compilation and partly a collection of original writings by Mr. Ruskin not before published.

RELATIVE to the sudden appearance of wild flowers on the waste ground opposite the Horse Guards, Whitehall, not the least surprising thing is the profusion of bracken to be found there. This is the more remarkable because it is excessively difficult to acclimatise bracken by artificial means in open spaces in towns. When Clissold Park was being laid out in 1888, the late Mr. Joseph Beck, to whom its preservation was largely due, taking advantage of his double position as a Common Councillor and a member of the London County Council, induced the verderers of Epping Forest to allow several cart-loads of soil, impregnated with bracken seed, to be taken from the Forest and shot down in a shady corner of the Park. At the end of seven years one or two meagre, struggling stalks are all that remain to attest his efforts. The bracken prefers the hard earth and the free air of heaven. The seed-laden wind bloweth where it listeth, and deposits its precious burden not in the luxuriant verdure of a public park, but on some desolate bit of building land.

THE Duke of Devonshire will preside at a banquet of the Sussex Archaeological Society to be held at the Queen's Hotel, at Eastbourne, on the 25th inst. The Duke and the Duchess will be present at the Battle of Flowers and Rose Fête on the 26th inst. One of the features of the procession will be coaches with Lancastrian and Yorkist colours, and the Duke of Manchester will pioneer the red rose coach.

THERE will be held in Geneva, from May 1st till October 15th, 1896, a great National Exhibition, representing its industries, both mercantile and agricultural. Of the forty-seven sections of this Swiss Exhibition, the most prominent will be those sections containing the clock and watch-making industry and the Arts of the jeweller and goldsmith.

AMONG the historical corners which lie almost hidden in London, out of the beaten route of many visitors, St. John's Gate, Clerkenwell, is one of the most interesting. It has, since 1886, been in the possession of the Knights of the Revived Order of St. John of Jerusalem in England, but it has had a chequered career since it formed part of the great Priory of the original knights. The Gate and the Crypt of St. John's Church alone remain of that venerable pile of buildings. From the literary and artistic point of view there is much that is of interest in these relics, and the album published by Messrs. Cadbury, Jones and Co., furnishes historical notes and letterpress descriptions of the Priory by John Underhill, to accompany the series of masterly etchings by William Monk, R.P.E., which present views of the exterior of the Gate, a fine specimen of the Perpendicular style, the interior of the Council Chamber and of St. John's Church, including the Crypt, showing three bays of the Norman Church formerly standing on this site.

WE hear from a correspondent that the Bath Town Council is naturally annoyed, not to say indignant, at the strictures which the Recorder thought fit to pass upon the accommodation, planning and dimensions of the new Sessions Courts, which were opened for the first time on Friday week. The new Court, it is generally admitted, might with advantage be loftier, but it was a case of preferring the administration of Justice or the transaction of municipal business. The Recorder thinks he should have been on the first floor, and occupied the position now taken by the new Council Chamber, and not on the ground floor underneath that apartment. There was not space enough to put both on the upper floor, and the Town Council, not unnaturally, secure the best position.

THE town of Reading is to be presented by Alderman Hill with the valuable facsimile of the Bayeux tapestry which has recently been exhibited in the Town Hall. The tapestry, which forms a pictorial history of England before the Norman Conquest, has been handed over by the donor free of conditions, and it will be placed in the new Art Gallery which is about to be built.

At Sotheby's a dispersal of antiquities has occupied two afternoons. The highest price was for a pair of Old English fire-dogs, enamelled, probably made in the time of Elizabeth or James I., £86; and a similar pair brought £50. A Greek Amphora, discovered near the Dipylon at Athens some eighty years ago by Mr. MacMichael, fetched £66. A neck ornament formed by eight thin plates of perforated amber, and a pair of hollow bosses of thin leaf-gold from earrings, found together in a tumulus at Lake in 1806, and some beads and other ornaments, £41; an interesting "St. John's Head" of alabaster, English work of the 14th century, £45; and one half or side of a stone mould in Syenite for casting bronze celts (a very rare object) found at Bulford, near Amesbury, £30. Most of these, with a variety of urns, bowls, rings, arrowheads, &c., came from the Collection of the Rev. E. Duke, of Lake House, Wilts, and sundry Babylonian contract tablets belonged to Mr. R. P. Greg, of Buntingford, Herts.

DOMESTIC stained glass usually leaves about as much to be desired in the way of artistic treatment as possible. It is the more remarkable because it really is a beautiful Art, and there is no reason why, with the aid of capable Artists and enterprise in manufacture, coloured windows should not be a thing to be desired, rather than avoided, by every one. At the Arts and Crafts Exhibition at Manchester, more than one exhibitor showed that this could be done, and the exhibits of Mr. Oscar Paterson were notable, not only for their colour, but their originality. Chief amongst these were his designs for window sundials—a novel method

of clocks which would have been in constant working order during this year of sunshine, but might strike at times for months to come if placed *in situ* within the four-mile radius.

THE experiments made in the navigable conditions of the Seine from Rouen to Paris are such as to give it a unique position amongst French inland waterways, and it now occupies a place midway between such tidal waterways as the Seine below Rouen, the Gironde so far as Bordeaux, the Loire so far as Nantes, and the ordinary rivers and canals of the country. It is navigable not only by small ocean steamers plying regularly between London and Paris, but also by coasting steamers of a still larger registered tonnage running between Paris and Nantes, Bordeaux and Bayonne. These vary from 600 to 1,000 tons burden. The tow-path has fallen into complete disuse; traction upon the river is wholly by steam, and a swifter and larger class of steam tow boat and lighter is now being placed upon it. A doubling of the locks and a great enlargement of their capacity has been, next to the greater depth of water obtained by dredging, the chief improvement made in the Seine. There are nine locks, or rather groups of locks, between Rouen and the fortifications of Paris, i.e., over a distance of 234 kiloms.

At length the Monument to the memory of Sergt.-Major John Allen, who rode in the ranks of the 13th Light Dragoons at the charge of Balaclava, October 25th, 1854, and who died in Leek last year, is completed and erected. The Committee (with the assistance of Mr. Larner Sugden) has been at some trouble in selecting a design and inscription which would tell to future generations how Leek once possessed one of those veterans who answered to the roll call after that fearful ride through the "Valley of the shadow of Death." The motif of the design is Cornish (at Linkinhorne) of the thirteenth century, with panel enrichment from Iona, and lettering of later date to suit modern perception. The stone used is Wetton's brown Kerridge, a warm relief from the abounding "white sepulchres." Mr. E. Hassall has executed the masonry, Mr. Millson the carving, and Mr. E. Phillips the relief gilding.

M. ADRIAN DIACONU, an Architect and Antiquarian, claims to have found in the ruins of the ancient Roman camp of Bersovia, at Bogdan, near Temesvar, unmistakable evidence that the Romans, and, in particular, the officers of the Fourth Legion (Flavia Felix) understood, as early as the second century, the Art of Printing, and made use of movable types while encamped at Bersovia. The reported discovery is said to be confirmed by two Bucharest savants and Members of the Academy, after a careful examination of the proofs collected by M. Diaconu.

THE old Church of St. John, at Leipzig, where Bach is buried, was lately pulled down. His grave, as the record states, is on the south side, and he is interred in an oak coffin. This was a rare distinction in 1750, only two of the 1,400 who died in Leipzig in that year being buried in oak. With these facts to guide them a committee of specialists began their search. Only two oak coffins were found, and the first examined contained the skeleton of a woman. The second, however, brought to light the skeleton of an elderly man, and when the bones were properly arranged, a general resemblance to Bach's figure was shown. There can be no doubt that the remains are his.

A REMARKABLE state of affairs exists at Kershaw Bridge, in the parishes of Ashreigney and Chulmleigh, and under the joint authority of Torrington and Chulmleigh District Councils. Some time ago the Bridge was partially destroyed by a flood, and since then the two authorities have been in disagreement as to the proportion of cost which each should pay towards re-building, with the consequence that the structure is impassable for vehicles, and a detour of about three miles is necessary. The point at issue is whether Chulmleigh Council is liable to the centre of the Bridge or the centre of the stream. Chulmleigh says the centre of the stream is its limit, and that it would be illegal to do work in another parish, while Torrington contends that the Bridge

should be evenly divided. The cost of the repairs would be about £400, of which the County Council would be responsible for some £150, and it is said that Chulmleigh District Council proposed that the work should be done without prejudice to the points in dispute.

THE celebrated Collection of Drawings and Engravings by the Early Masters, which was formed by the late Mr. John Malcolm, of Poltalloch, and deposited in the Department of Prints and Drawings at the British Museum in 1893, has been offered by its present owner, Col. J. Wingfield Malcolm, to the Trustees of that Institution for purchase at the price of £25,000. The Treasury, on the recommendation of the Trustees, has agreed to the purchase, and a vote for the sum required will be included in the supplementary estimates to be laid before Parliament.

MR. MERRYWEATHER, of fire-extinguishing machinery fame, is decidedly of opinion that London is insufficiently protected from the danger of fire. If two or three really big fires were to burst out suddenly in the Metropolis, he would not answer for the consequences. The whole city might be left a mass of smouldering ruins, as it was once before, more than two hundred years ago. The present organisation would be incapable of coping successfully with such a difficulty, although he admits that it suffices to meet all ordinary emergencies. Although much is said of the efficiency of Fire Brigades on the other side of the Atlantic, Mr. Merryweather is of opinion that we have nothing to learn in this respect from our American relatives. In fact, we are ahead of them. We have now in England engines with which we can get up a pressure of one hundred pounds to the square inch in five and three-quarter minutes, and what is equally important, the engine, tender, and hose box, unlike those in use in most American cities, form one single machine, and consequently always arrive at a fire together.

ONE of the most remarkable feats of electric lighting yet carried out is the erection of a double row of row candle-power lamps on either side of the Gedney Channel, Sandy Hook. High-pressure current is supplied to the lamps by a submarine cable six and a half miles long, and the lamps are mounted on posts 12 ft. high attached to floating buoys. In this way a narrow channel, hitherto impassable after dark, has been converted into a comparatively brilliant thoroughfare, in which ships can pass in the night.

THE Berlin Anthropological Society has just made an interesting excursion to the "Schliebener Circular Wall" at Merseburg. This ancient wall lies in a charming landscape, clad in woods of oak, ash and beech. Professor Virchow, youthful and enterprising as ever, and his eldest son, formed part of the company. The Schliebener Wall belongs to the old German period. It was built some 200 years B.C. and forms an ellipse, the widest part of which measures some 500 ft. An excavation was undertaken in the centre of the ellipse, but only a few fragments of pottery were found. The wall is 5 ft. wide and 18 ft. high. Virchow plucked a nosegay of wild flowers. The Schliebener Wall has furnished the Museums of Berlin, Leipzig, Halle and Dresden with many interesting antiquities, and has been well described by German archaeologists, one of the most famous of these writers being F. A. Wagner, who is buried at Schlieben, and on whose tomb stand three of the most beautiful urns, found by himself. The inscription on his tomb runs: "Here, in this earth, Christians, Jews and Heathens are equal." A monument is to be erected to him on the top of the hill next August. It is a curious fact that so far north in Germany there are vineyards belonging to Schlieben which produce a quite tolerable wine.

AUTUMN will bring many Photographic Shows. In addition to the Annual Show of the Royal Photographic Society of Great Britain, which will be held in Pall Mall from September 28th to November 14th, there will be a Photographic Salon at the Dudley Gallery from September 30th to November 2nd. At Lancaster there will be a section of the Industries

and Art Exhibition devoted to photographs. It will be open from August 17th to the 31st. On the Continent there will be two International Photographic Exhibitions, one at Amsterdam from September 8th to September 25th, and one at Brussels from August 31st to September 30th.

In the central panel of the Hackney Vestry's Hall, a portrait of the Lord Chief Justice is to be hung, and we note that a bust of the late Lord Bowen has been unveiled at Rugby, the ceremony being performed by Lord Davey, whose friendship with the deceased judge began at the famous School and lasted throughout his career. It is to be regretted that a similar monument to his memory has not been erected in the Royal Courts of Justice. The busts of departed judges would find a fitting place in the Central Hall and the Corridors of the building. Sir George Jessel is the only occupant of the Bench whose features have been perpetuated in marble in the precincts of the Courts. Why the memories of judges like Lord Hannen, Lord Coleridge, Sir James FitzJames Stephen, Lord Bowen, and Lord Selborne are not deemed worthy of the same honour it would be hard to say.

THE Glasgow Harbour Tunnel, which passes beneath the Clyde at Finnieston, has been opened. For long a need has been felt for improved means of communication across the Clyde at the harbour. Various schemes had been mooted, such as High-Level Bridges, Swing Bridges, but at length a Tunnel was decided on. The approach on either side is by a circular shaft, 80 ft. in diameter, in which are operated hydraulic hoists, raising and lowering the vehicles as they leave or enter the Tunnels. The Tunnels are lined with cast-iron segments, filled in with concrete and lined with glazed brick, presenting a particularly neat and pleasing appearance. The hoisting appliances were supplied by the Otis Elevator Company (Limited), of London. Messrs. Simpson and Wilson, C.E., of Glasgow, were the engineers.

SPECIFICATIONS, estimates, and plans are being prepared by order of the Viceroy Chang for the establishment of large Ironworks at Nankin, China, similar to those at Hanyang, built by the same official a few years ago. These new ironworks are intended to supplement the Hanyang Ironworks in supplying the materials for the Trunk Railway to connect Canton and Peking. The preliminary line will be between Yangchow on the Yangtze and Ts'ingkiangpu on the Grand Canal. These two Cities will then be the starting points for the extensions north and south. From recent accounts it is considered probable that the Yangchow-Ts'ingkiangpu Railway will be begun some time in the latter part of this year or early next spring.

ON Saturday last the Institution of Junior Engineers visited Messrs. Willans & Robinson's Works, Thames Ditton. These works were started in 1881 by the late Mr. P. W. Willans and Mr. Mark Robinson, for the manufacture

of the Willans' three-crank compound engine. In 1885-6 Mr. Willans designed his well-known central-valve engine. Metric measurement was adopted at the works in 1893 for all new designs, the result being completely satisfactory. In the Erecting Shop is an electric traveller to lift 25 tons; and on the wharf a crane lifting eight tons, fitted with "whipping jigger." The Pattern Shop wood-working machinery and the Foundry Farcot fan are driven by electric motors. In the Machine Shop are to be seen machines for slot drilling, special vertical drill, works' engine, gauging of cylinders and trunks, and parts of Willans' engines in various stages of progress.

THE sale of the presentation plate, enamelled gold boxes, sword hilts, and other treasures, formerly in the possession of Admiral Viscount Nelson, attracted a large gathering of spectators to Christie's, and the prices given for the best

San Joachim, the Grand Cross of the Order of San Joachim, the Jewel of the Neapolitan Order of San Ferdinando, and the Grand Cross of the same Order. All these, with the exception, of course, of the medal in memory of Trafalgar, were worn by Nelson at the time he was killed. Amongst the presents and objects of personal use, the gold sword hilt presented by the Captains of the Fleet brought £1,080. It is formed as a terminal figure of a crocodile, enamelled with an allegorical group, the arms of the Admiral, a representation of the Battle of the Nile, and the names of the donors. The oval gold box presented with the Freedom of the City of London, the borders chased with oak and laurel foliage, and the lid inlaid with an enamel illustrating the engagement off St. Vincent, 1797, realised £1,050. The silver-gilt inkstand, a gift from Sir William and Lady Hamilton, fell at £520; an oblong box of oak, mounted with silver, inscribed

"The gift of the Corporation of Thetford, Norfolk, to their gallant countryman," &c., fetched £85; a circular silver box, the lid engraved with the arms and motto of the Town of Plymouth, £90; the combined gold fork and knife, engraved with initial and coronet, presented to Nelson by Countess Spencer at the time when Earl Spencer was First Lord of the Admiralty, £260; a commemoration medal of the Nile victory with a chasing of the fleet in relief, 145 guineas, and another similar, 145 guineas; and a gold sword hilt, chased and spirally fluted, and studded with paste diamonds, presented by the King of Naples, £170. The necklace of brilliants, consisting of the stones removed from the Sword of Honour presented by the King of Naples, was put up at £500, and reached £1,250; the aigrette of rose diamonds, given by the Sultan of Turkey after the Battle of the Nile, went at £710; and a brooch formed of pastes, the fastening to the "Cloak of Honour," also given by the Sultan, was knocked down at £260. The service of silver, engraved with coronets and initials, was dispersed in different lots.

THE possibility of Newhaven developing into a much larger and prosperous town seems to be well in view. Recently the Newhaven



THE GREAT HALL OF RHINEFIELD: BY ROMAINE-WALKER AND TANNER.

of these relics were sufficient to show that sentiment and patriotic feelings are still rife amongst those who in a busy age can afford to indulge in them. Eleven items were withdrawn from auction, for the good reason that by private purchase they have been acquired by the Chancellor of the Exchequer from Lord Bridport to become the property of the nation, the sum stated to be given for them being £2,500. The country thus possesses the gold medal for the victory of Trafalgar, inscribed "The combined fleets of France and Spain defeated.—Horatio, Viscount Nelson, Vice-Admiral and Commander-in-Chief, on the 21st October, 1805"; the Service medals for the victory of St. Vincent, with original riband, inscription, and date 1797, and the Nile, 1st of August, 1798; the Gold Star and Badges of the Turkish Order of the Crescent, the Jewel of the Order of the Bath, with riband, and another of the Sardinian Order of

Guardians applied to the Local Government Board for leave to borrow £600 for the purchase of land adjacent to the present Workhouse, for the purpose eventually of building new premises, and the purport of the Local Government Board's answer seems to be that it is desirable for the Guardians to reconsider their proposal to the extent of purchasing another acre. It is probable that the suggestion of the Central Board will be carried out, for it was decided last week to ask the owner of the land in question to sell an additional acre. There can be no doubt as to the growth of the town. The Harbour Company are deepening the entrance to the harbour every day, and some months ago it was seen that a water-logged vessel drawing some inches over thirty-one feet of water could get into the port easily. This facility for berthing large vessels must eventually increase the import and export trade of the port.

LEEDS having been raised to a city, the Corporation there are about to place in the Town Hall an engraved brass, recording some interesting facts. In the days of the Domesday Book it was described as a farming village. In 1207 the lord of the manor gave the inhabitants a limited charter. Charles II. granted a new and enlarged charter, and the Council was made to consist of a Mayor, twelve Aldermen, and twenty-four Assistants. In 1833 the Municipal Councils Act was carried, and Leeds was divided into twelve wards, with sixteen Aldermen. Two years ago it gained the charter which conferred on it the coveted distinction of being called a city. It is curious to note the rivalry between Bradford and Leeds. Like most neighbours they are a little jealous of each other, as Sydney and Melbourne in Australia, or Chicago and New York on the other side of the Atlantic.

WHITTINGHAM in East Lothian, the ancestral home of Mr. Balfour, is a beautiful place. The Mansion was erected seventy years ago by Mr. Balfour's grandfather, who may be regarded as the founder of the family. The building is roomy; it has about fifty apartments, some of which are large and handsome. The Library, which runs along one side of the house, is, with its long row of tall windows and solid pillars, particularly handsome. It is well stocked with works of History, Philosophy, Religion, and general Literature, ancient and modern.

THE casket in which the illuminated certificate of the freedom of the City of London was presented to Viscount Peel, bears in the centre an enamel painting of the Houses of Parliament from the river, surrounded by a band bearing between enamelled ornaments the names of the various qualities ascribed to the late Speaker. In the corners of centre panel are seen the rose, thistle, shamrock, and leek, in raised gold on blue ground. At each side is a sunken panel containing an ornamental design in relief. The lid bears an ornamental arch, wherein are seen the maces in saltire, surrounded by an arrangement of oak and laurel leaves, and bearing the motto "Pro bono publico." Above this, on a highly raised throne, flanked by bracelets of light open work, appears a figure in rich modelled gold, symbolical of Justice and Prudence, represented by a female holding the scales and sword of Justice, and the bit representing Restraint or Prudence. At each corner is a flaming vase. The ends of the box contain ornamental medallions in form of enamelled monogram, A.W.P., and the arms of the late Speaker in heraldic colours. The casket rests on a massive stand of silver gilt, burnished and friezed, supported by four recumbent British lions, modelled in silver, richly gilt, and bears in the centre the full arms of the City of London, also in correct heraldic colours.



MEN WHO BUILD.

No. 21.

MR ROMAINE-WALKER.



BOND STREET, but not in its glory—of fashion and fancy, fair women and fine steeds, and alluring shops where the little natsuki from Japan, and the beaten bowls from Benares, vie with Fuller's maddening confections, the diamonds of Streeter, marquetaire magnificences of Wertheimer, or the blue and cinnamon concoctions of the modern potter. And there are a myriad milliners in Bond Street, Art milliners too, and you are not the man to deny that the woman who deftly arranges the newest thing from Paris—delightful flowers and lingering laces, wondrous straws and ribbons of ethereal charm—has not the touch of genius that makes all things beautiful. Then there are prints, modern antiques, of paper and printer's ink—frauds on the face of them, but none the less interesting, to the casual purchaser. And other *artistes*, in boots and hats and gloves. Silversmiths,—mere middlemen of patent shoes and patent hearts, who buy and sell their wares, as a butcher does his meat, by the ounce or by the ton—mediocrities, set out on pink plush, to debauch the eye of the brazen and the fool. There is an Artist in fish—a man of Scale. His fine salmon, lusciously bathed in pounded ice, red mullet in their season, and trout—the truly beautiful trout—displayed upon the honest slab, not pell mell like the humble sprat, but in gradation, according to social priority in the fishy World. In short, Art of a kind touches all things in Bond Street. The honest trader in fruits knows the value of colour far better than we think he does. He studies the various greens of his apples, the tones of his lemons, the brilliant shades of his oranges. He appreciates the tender softness of the trailing fern, cunningly disposed among the ripening water-melons, and the sombreness

of the grape is not without merit in his schemes of window decoration. The Architect could do worse than study the Architecture of God's own natural things.

One wonders what all this has to do with Romaine-Walker; nothing more, perhaps, than that, like yourself, he studies "as he runs," and finds sermons even in the superficial influences of Bond Street. As he runs, say you, but Romaine-Walker never runs. He is more of an Architectural epicure, one that seeks for the dainties of his Craft, leaving the solid joints to others who may relish



them. At first flush one would think he cultivated the dramatic touch, and in truth he does, for he has done good dramatic work—the decorations of the Empire Theatre, for instance, and with some actors he has a close friendship. Tall, with an intensely dramatic face of the Forbes Robinson type, Romaine-Walker enhances the teachings of his beloved Italy by bringing the finality of refinement into the Bohemian promptings of his nature. His marriage with an Italian lady has aided in the development.

Romaine-Walker had the advantage of tuition under Street—and to this day he



"RHINEFIELD": THE TERRACE FRONT: ROMAINE-WALKER AND TANNER, ARCHITECTS.

never ceases to thank that master's thoughtfulness in insisting that his pupil should go through the modelling shed, study the Antique, and draw from the life. Soon after commencing his practice, Romaine-Walker had the good fortune—in the Art sense—to become associated with the late Duke of Marlborough, a man who has never been properly understood and perhaps never will be. The Association ripened into an intense friendship, the one connecting link between the two men being their equal love of Art. If Romaine-Walker ever discusses his patron, it is to pronounce him a giant of artistic conceptions, to extol his wonderful perceptive faculties, and to add a noble tribute to a man whose fate it was to defy and to revel in the World's opinion of himself.

In Mr. Walker's own room, with its cherry red silk curtains toning the glare of the sun and making his apartment "hotter" than it otherwise would be, stands a model of the magnificent organ which he designed for the Duke, at Blenheim. Willis, its constructor, admits it to be equal to his creation at Albert Hall, and it stands in the celebrated gallery that will establish Vanburgh's reputation for all time. A follower in many respects of the late Mr. Devey, Romaine-Walker delights in models, and he has a miniature wooden skittle representing himself, by which he is able in walking round his models to determine exactly the aspect of his buildings from any point. With his own hands he designs every atom of detail in his works, and nothing delights him more than to hunt Europe for old panelings and carvings which he can incorporate in his own interiors. The greater part of the staircase in the house he built for Mr. Theo. Zarifi was constructed in this way, and the Bachelor Wing at Canford which he did for Lord Wimborne, owes much of its fine woodwork to Mr. Walker's travels in the South of France, so thoroughly did he "learn" his France with the Duke. There is a characteristic little story that may now be made known. It is admitted on all hands that the finest living authority on French work and Art of the Louis XVth and XVIth periods

is the great Duveen, now a close neighbour of Romaine-Walker in Bond Street. Like all really good men Duveen is not a little proud of his accomplishment, but he has on more than one occasion fearlessly asserted that he was himself a long way behind the late Duke of Marlborough in this respect.

More than to any other phase of Architectural Art Romaine-Walker has devoted himself to the study of Colour. All

approaching its perfection exists in Western Europe. So closely, indeed, has Mr. Walker studied the motive of Colour, that he admits to having studied the actual dispositions of his clients before he attempts to colour the rooms in which they live, and, surely, the Art of the Artist can go no further than this.

In his own "house" in Hyde Park Mansions, Romaine-Walker has run wild over his love of panelling, and his oak room is very fine. When he is not sojourning in the homely Palaces of England, revelling in the delights of a peculiarly pleasant practice, or yachting, or dallying through Southern Europe, he may be discovered sipping the nectar of Dramatic Art, or coatless, and hidden from the World behind the cherry red curtains of his study, pouring over his drawing board, or a design which he intends sending over to workmen in his beloved France.

VISITORS to the Assyrian Sculpture Galleries of the British Museum may remark a winged figure holding a bucket or basket, and presenting what seems a pine cone towards a tree. This was formerly supposed to be a "cherub" offering a cone, the emblem of reproduction, to the "sacred tree" of the Babylonian mythology. Some years ago, however, Dr. E. B. Tylor suggested that it symbolised the fertilisation of the female date palm with the inflorescence of the male tree, and the explanation has been generally accepted. Dr. E. Bonavia has lately given a still more probable elucidation of the mystery. He shows that the bucket is evidently meant to carry holy water, and that the cone is an aspergillum, such as is still found in the East. The winged figure is, in fact, a "rain-bringer."

It is represented that the "Wesley Tree" at Cambo, Northumberland, is greatly decayed. Various appliances have been used to keep the parts together, supplemented and fortified by a substantial fence. A new tree has also been

planted close by and a stone Monument, erected by Sir George Trevelyan, bears the simple inscription: "John Wesley preached here on his 79th birthday, June 17th, 1782."

THAT most conscientious Art critic and subtle literary craftsman, M. Gustave Geffroy, has almost ready for publication the fourth volume of "La Vie Artistique." The frontispiece, a feature of the series, will on this occasion be by Raffaelli.



THE GREAT ORGAN AT BLENHEIM PALACE: DESIGNED BY ROMAINE-WALKER.

shades of red are his particular delight, except the shade of bood, and that has the extraordinary physical effect upon him of turning him faint immediately he meets it. The finest colour thing he has yet done is the Smoking Room at Rhinefield, which takes the form of an absolutely perfect Mosque, over which he spent ten years of persistent study and attention. Nothing

THE DESTRUCTION OF EDINBURGH.

"A MOUNTAIN OF FOLLY!"

We content ourselves this week with giving a selection of letters we have received from all parts of England and Scotland. We insert a letter over an initial because the writer has explained why he uses it, in place of his own name, and his explanation seems good. We also publish a communication which goes, it seems to us, wide of the mark, and enters into details which have all along been rigorously excluded from the controversy. The question whether Mr. Beattie's design is good or bad Architecture is not the point. We are prosecuting our endeavours to prevent or to modify the action of the North British Railway Company, and shall at the right moment announce the result of our efforts.

SIR,—Correspondence in newspapers has no charm for me, it takes up valuable time; it distracts attention from one's work, and to me it is not a pleasant occupation, but this monster Hotel business compels me to lay aside my usual quiet work and to raise my protest against the erection of a mountain of masonry in the shape of this Hotel; its size, its height, its situation will be the destruction of one of the fairest cities in Europe; all buildings in its immediate neighbourhood will be dwarfed and spoiled, and the view of Calton Hill will be mainly obscured and blotted out from view.

I cannot believe the citizens of Edinburgh can realise what the result will be if this mountain is raised to the position it is to occupy, or they would take immediate steps to save their City from destruction, and themselves from the disgrace that will follow from their supineness. Once build this monster Hotel, and the beauty of Edinburgh is gone for ever. The only way for laymen to realise the true effect of this huge monster, is to adopt Lord Wemyss' suggestion—put some scaffold poles up to the level of the ridge of the Hotel, and then it will be apparent what destruction of view will follow. I am confident that long before the scaffolding is up to the height I have suggested, there will be a shout of indignation that will stop this mad scheme of the Directors of the Railway Company.

Another way is to appoint a Commission to receive evidence of experts, or have a model made of that part of Princes Street with the model of this Mountain of Masonry set up in its place. Then I am confident the eyes of the citizens will be opened, and we shall have this fair City of Edinburgh preserved for the enjoyment of generations yet unborn. We who admire and have enjoyed its beauty must do all in our power to hand it down to posterity. If once destroyed it can never again be restored.—I am, Sir, yours faithfully,

JAMES BROOKS, V.P. F.R.I.B.A.
35, Wellington Street, Strand, W.C.

SIR,—Edinburgh is altogether an exceptional city, and the people have, up to the present time, in all their buildings, avoided shutting out the view of the beautiful natural surroundings, and have observed a harmony and unity of character in the Architecture of the City.

The proposed North British Hotel will be an entire departure from the course which has hitherto been followed.

That the huge building, apart from its Architecture, will be out of scale with its site and surroundings, and will destroy the beauty of Edinburgh, has been demonstrated by Lord Wemyss, by letters, drawings and figures in *The Scotsman* and *Evening News*, and by *THE BUILDERS' JOURNAL*, so that the citizens of Edinburgh have been duly warned of the coming destruction. Hitherto they have been proud to bear their city called "the Modern Athens," and that they have not risen in revolt to prevent this name being turned into one of derision by the erection of this gigantic Hotel in the very centre of the most beautiful view in their city, must be due to the fact that the public do not, and possibly cannot, understand the effect a building will have on its surroundings, from a drawing.

The Scotsman dishes up to them the weak argument, that because the Cockburn Association or some patriotic citizen has not protested against this monster building, therefore it is all

right, and tries to lull the people into indifference by saying that after the Hotel is built, "Edinburgh will still stand where it did." Yes, Mr. Editor and Patriotic Citizen, it will; but it will nevermore be what it was, "the Modern Athens."

It would be a sounder argument to say that because the Cockburn Association and the Patriotic Citizen have not protested, therefore this is an instance where "familiarity breeds contempt," and that people who only see Edinburgh occasionally seem to be more keenly alive to its beauty than those who see it every day.

We have a Society for the protection of ancient buildings, but we have no Society for the preservation of the beauty of ancient cities, to take this matter up. But surely, the directors of the North British cannot be altogether indifferent to this question of preserving the beauty of Edinburgh. It is not too late for them to appoint a committee of experts to advise them and see whether something cannot be done to save the beauty of Edinburgh from destruction by at least reducing the height of the proposed building.

After all the matter rests with the citizens of Edinburgh; it is not yet too late for them to bestir themselves. Let them remember they are the heirs for life of a city without its equal in the World, a city built up amidst natural beauty by the care and good taste of those who have gone before them, and it will be an everlasting discredit to the present citizens of Edinburgh if in the future it shall be said of them, "They inherited a city which for its beauty was called 'The Modern Athens' and in sheer carelessness and indifference they Americanized it into a 'Scottish New York.'"

I am Sir, yours faithfully,
6, Lancaster Place, W.C. WM. YOUNG.

SIR,—It may not be surprising that a Railway Company should invite Architects to compete in the designing of a monster Hotel, but it is perhaps astonishing that half-a-dozen Architects, men, like Michael Cassio, of "reputation," should be found, if not eager for the fray, at least ready to enter it—that Architects, who of all men should be interested in a beauty which in some degree was by their own Profession created, should engage with their eyes open in a conspiracy for its destruction. The names of several of those Architects whose genius has conferred grace and grandeur upon the Scottish Metropolis have been put upon imperishable record; but men from various causes have attained immortal notoriety—"See Cromwell, damn'd to everlasting fame"—and it may be that each of the selected six was animated by the noble ambition of, by a rare opportunity, making his mark in unmistakable form upon a City unique by no less its picturesqueness than its historical associations. It is more customary in Edinburgh than in Glasgow for the Architect to inscribe his name upon his work, and it would be interesting to not only our own posterity but also to the Macaulayan New Zealander to know who was the Architect of "the observ'd of all observers."

Did no one withstand the temptation? Dr. Anderson wrote a long letter, but not about "the destruction of Edinburgh." When some years ago it was proposed to raze the Guty Steeple and the Consistory House of Glasgow Cathedral, the leading Architects of Glasgow, those who had some regard for picturesqueness, as well as veneration for antiquity, issued a protest. But the select six could not protest against "the destruction of Edinburgh." Did the Association as a body? Did the Cockburn Society? Did the Corporation? Did the representatives in Parliament? Did the citizens generally? As sings "the poet" in "Don Juan," "What, silent still? and silent all?"

"When the oldest cask is opened,
And the largest lamp is lit;
When the chestnuts glow in Embro',
And the kid turns on the spit;
When young and old in circle
Recite the tale or ditty,
Will grateful Fame proclaim the name
Of one who spared a city?"

Dr. Johnson had a poor opinion of "patriotism," and of Scottish patriotism he would likely have had the poorest. There is now neither the genius nor the patriotism, or we might have

another "Curse of Minerva" directed against the spoliation of not the Ancient but "the Modern Athens."

It cannot be lost sight of that the beauty of Edinburgh may be regarded as one of its "assets," and this beauty destroyed, it is probable that the North British Railway Company may carry fewer passengers.

The style of the chosen design is one better suited to the old town than to the new—where indeed the Scott Monument would have more sympathetic surroundings.

I am, Sir, yours faithfully,
Glasgow, July, 1895. G.

SIR,—Having carefully perused the articles, headed as above, in your valuable paper, and being interested in the subject, I beg leave to crave your indulgence with regard to the following remarks.

In your issue of 2nd inst. you publish a sketch, submitted in the recent competition by one of the competitors, which is to some extent misleading. Mr. Brydon, in his able letter, takes exception to the "monster Hotel" on the ground that it is out of scale with its surroundings. In this he is correct so far as the sketch published is concerned, and it is with the object of correcting this impression that I enclose a sketch, from the same point of view, of Mr. Beattie's design.

The most important point of a design in a situation such as this, seems to have been by all the competitors, save Mr. Beattie, overlooked—viz., harmony, not with any individual building, but with the whole surroundings, which are essentially of a pointed and rugged character, and naturally any design of a square treatment is utterly unsuitable for such a position. Again, a point in which Mr. Beattie's design is eminently superior to any others submitted is, that he has recognised the necessity of having a prominent feature, in the shape of a Tower, placed in such a position as to lead the eye from the Scott Monument to that of Nelson on the Calton Hill. This will become evident by placing a small piece of paper, or the finger, over the Tower in Mr. Beattie's design and removing it after a few moments' observation, when the necessity of such a feature will, I think, at once be admitted.

In reference to the sketches in your issue of the 9th inst., which I understand were made under the personal supervision of Lord Wemyss, No. 1 is calculated to a great extent to create a wrong impression. His Lordship has taken advantage of a want of knowledge of Architecture on the part of the public, in respect that he has merely blocked the Hotel out in black, whilst the surrounding features remain in outline, thereby drawing the attention of the eye entirely to the black mass in the centre of the picture, and preventing a proper reading of the design in conjunction with the adjacent buildings.

In No. 3 a certain argument in favour of his Lordship's view, namely, the blocking out and dwarfing of the Calton Hill, has been taken advantage of by lowering and shortening the point of sight, thereby placing the Hotel in a position which admittedly covers the Calton Hill, but one which, supposing the corner to be left clear, and the Post Office alone remaining, would have the same effect.

In reference to this sketch, may I ask where is the Nelson Monument? I suppose it to be behind the small turreted chimney in the centre of the building, but we are again led astray by the fact that the position of this chimney is wrong, as a glance at the design will at once make clear.

Finally, I would say if the amenity of Edinburgh is so much at heart with its citizens, let them prevent, if possible, any building being placed on this site, but if build you must, then the design most suited for the situation is that of the successful competitor.

I am, Sir, yours faithfully,
WM. NICHOLSON CUMMING, A.R.I.B.A.
213, Leith Walk, Edinburgh.

SIR,—The thanks of all true Scotchmen—and Englishmen, too, for the matter of that—are due to you for the very spirited manner in which you have taken up this matter; and, as an Edinburgh man, I want to add my most energetic protest to those you have published against this outrageous project. Edinburgh—"Modern

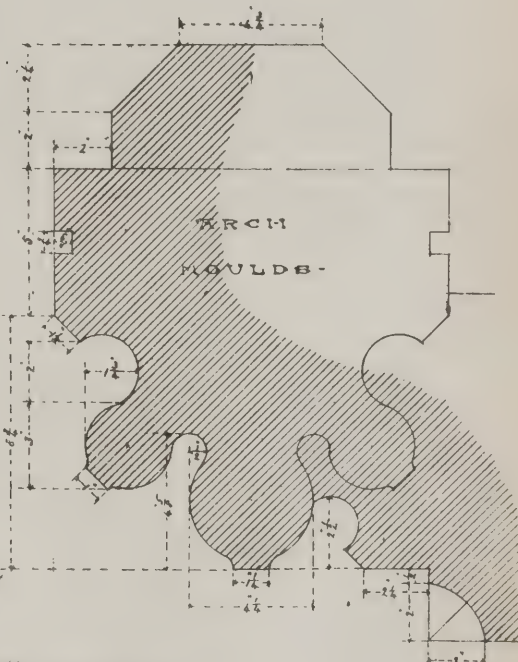
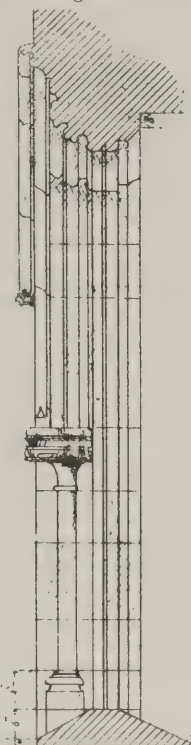
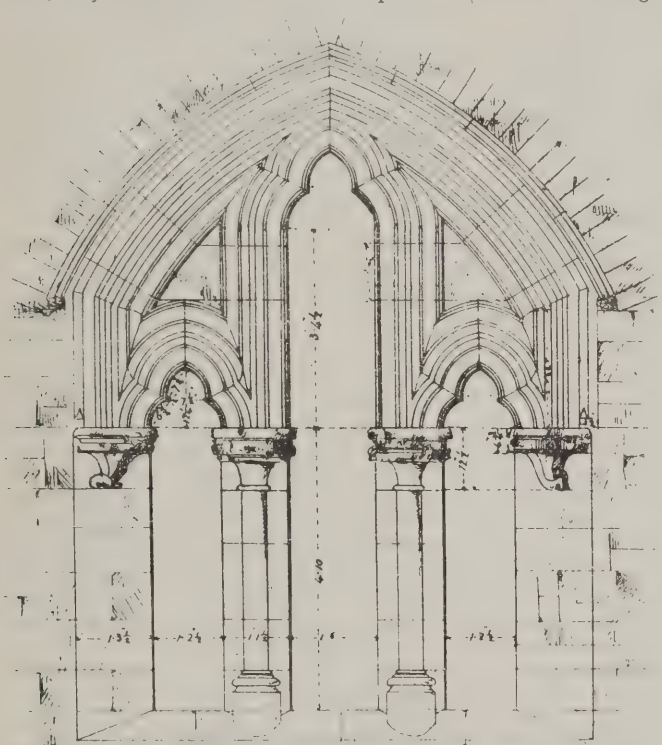
Athens"—stands unique for its marvellous Classic and picturesque surroundings, and I have always been proud to think how jealous its inhabitants have been, that, in the laying out of the New Town, nothing should be done either in plan or structure that should mar the unequalled views from every point that are the delight of all. I wish to goodness Ruskin's lecture on Architecture, delivered in Edinburgh forty years ago, could be read by every man, woman and child in Edinburgh; there the whole matter is summed up in the quotation you have rightly printed in italics, viz., "You must either help your scenery or destroy it." Can any man living put it better than that? And yet, what are we about to do? Why! we are going to "destroy our scenery" at the bidding of the Directors of the N.B.R., who want to rear a vast building, towering into the clouds, that will simply obliterate from every point of view the very features we are all so proud of. It isn't a question of Design—that, as far as I know, may be admirable—but it is a question

DESIGN IN ITS DECORATIVE ASPECT.

A BIRMINGHAM EXHIBITION.

DIFFERING in character from any special Exhibition held at the Corporation Museum and Art Gallery, Birmingham, a Loan Collection has been secured by Mr. Whitworth Wallis. It deals entirely with the Arts of Design in their decorative aspect. The Collection, which covers to a limited extent the ground covered by the Arts and Crafts Exhibition in London, though small, contains in some of its departments some of the noblest and choicest examples available in this country. The Art of Pictorial Decoration in various media is exemplified by Ford Madox Brown, Burne-Jones, Walter Crane, Richmond, William Morris and other masters. In addition, a few examples of designs for metal work, are shown in the Long Room, and there has been arranged in the Wedgwood Gallery

Art has taken of late in the province of Design, but suggest the question why the execution is so far mainly in the hands of foreign craftsmen. Sir Edward Burne-Jones is represented for instance by a design, "The Tree of Forgiveness," for the roof of the Apse of the American Protestant Episcopal Church in Rome. This design, forming part of a scheme covering a space of about 800 square feet, is intended to fill one of the arches. It is rich in the devout and poetic symbolism in the expression of which Burne-Jones is such a master, as witness the mystical illusion of the Crucifixion in the "Tree of Life." The mosaic decoration of St. Paul's Cathedral is illustrated by a number of the accepted designs by Mr. W. B. Richmond, A.R.A., whose "Prometheus," presented by him to the Gallery some years ago, has rendered his power of working on a colossal scale familiar to Birmingham students. The selection embraces a number of the designs in miniature and enlargements on the ultimate scale of some of the more striking details. It



TINTERN ABBEY: THE WEST WINDOW OF SOUTH AISLE.

of Scale. Any leviathan structure of that kind on such a spot will simply ruin the whole picture. Cannot the Railway Company fashion their requirements in a building that will not extend, say, the elevation of the Post Office, and otherwise be conformable to the Classic surroundings? At any rate, good design or bad, hotel accommodation or no, the thing is an intolerable nuisance in that particular plan, and I do hope that all lovers of our beautiful Capital will arise in their wrath and sturdily say, No!!—I am, Sir, yours faithfully,

GEO. A. LAWSON, H.R.S.A.

6, Marlborough Road,
St. John's Wood, N.W.,

SLONK HILL, at Shoreham, is a favoured site for Cottage Homes, the erection of which the Guardians of the Steyning Union have under their consideration.

A RECUMBENT effigy of the late Dean Elliot, which has been placed in Bristol Cathedral, was unveiled on Saturday.

a large historical collection of lace. The Art of Frescoe Painting has among its illustrations, as one would naturally expect in a Modern English Collection, an illustration of Ford Madox Brown's mural decoration, the chief example of this Artist here being the cartoon representing "The Expulsion of the Danes from Manchester," designed for the Manchester Town Hall. The design, apart from its technical lessons, tells its story with vigour, and is full of points of human interest. On the opposite wall are three pen-and-pencil studies for "Lancelot at the Shrine of the Holy Grail," the wall picture painted by Dante Gabriel Rossetti, in the Union Clubroom, Oxford, in 1857. These possess a melancholy interest as a memento of the ambitious early attempt of Rossetti, with the aid of Burne-Jones and other pre-Raphaelites at fresco painting, and of the pathetic failure of artistic aptitude through lack of technical experience. A kindred Art, that of Mosaic Decoration, is illustrated by several notable examples. These not only show the high position which native

is open to question whether the work is not a little too fine for scenic effect; but at any rate, the composition, drawing, and colouring, and their adaptation to the Architecture will be found full of interest for students. The subjects include several of the "Creation" series, with enlargements of the heads of Christ, Kings David and Solomon, the Recording Angel, the Sybils, and other important figures. Another of the Architectural decorative departments very beautifully exemplified in the Collection is that of stained glass. Here Burne-Jones, of course, is *facile princeps*. In the designs "Judgment Day" for the great window of East Hampstead Church, Sir Edward's power in composition in the studied use of vacant spaces and in the pose and expression of stately figures is grandly illustrated. The mail-clad figure of the angel St. Michael proclaiming the "Dies Iræ" contrasts strikingly with those of the angels below, the one on the right beatifically reflecting the joy of the blest, and that on the left expressing in attitude and gesture horror at the fate of the wicked.

BRITISH STUDENTS AT ATHENS.

"THE CITY OF THE VIOLET CROWN."

WHY has the British School at Athens received so little support? The study of Greek Archaeology has never been more popular in England than it is at present. Not only are young Classical scholars devoting themselves to the subject in greater numbers every year, but the public follows with keen interest the progress of the explorations in Greece, Cyprus, Crete, and Asia Minor carried out from time to time by English and foreign scholars. Schliemann's work at Troy, Tiryns, Mycenæ, and elsewhere, inspired scholars to dig, and the Germans at Olympia, the French at Delphi, the Americans at Argos, the Greeks at Eleusis, and our own countrymen at Megalopolis and in Cyprus have already followed his example with striking success. While the German, French, and American Schools at Athens continue to prosper, it is unpleasant to find that the British School is falling behind the rest, solely for want of funds. At the influential meeting of friends of the School held under the presidency of the Prince of Wales on Tuesday, it was stated that the income of the Institution was little more than £500 a year, three-fifths of which is contributed by the University of Oxford, the Hellenic Society, and Mr. Walter Leaf, while the rest is given by about eighty persons. We, who are supposed to be the wealthiest nation in the World, can only afford £500, but France gives her School £3,120, Germany gives hers £2,400, and the American School has an income of £2,000 a year. The French and the Germans do not limit the work done by the amount of the yearly income, but contribute large sums for special explorations. For instance, the German Government has spent £40,000 at Olympia and the French Government £29,000 at Delphi, while our Archaeologists have had the greatest difficulty in collecting a few hundred pounds from friends for the small but extremely fruitful excavations which they have made on various sites. The result is that unless the British School receives prompt and liberal assistance it will have to abandon the research work which has formed the more important part of its labours, and English scholars will be debarred from sharing in the discoveries which are certain to be made in the near future. Hitherto, perhaps, the School has been too little known outside learned circles to meet with the support it needs, but now that its case is fully set before the public, we must, if possible, partly by Government allowance and partly by private munificence, elevate British energy and good taste a little more nearly to the level of these brilliant and ardent foreigners. Before quitting office Sir William Harcourt, we have reason to believe, promised that he would propose a small annual vote for the British School of Archaeology at Athens. The new Chancellor of the Exchequer will certainly not fail to carry out this reasonable and intellectual grant. But for the purposes of good work in this rich field there is needed a steady supplemental revenue for the School, for a term of years running, say, to ten; and this ought to be easily accomplished. It is perhaps necessary to know Athens well, and to have wandered for days and weeks among the enchantment of its ruins to appreciate the full force of such an appeal that England should do her part in saving all that can be found of her antique splendour and grace and wisdom. Next to the emotion caused to an imaginative traveller who stands by the Lake of Galilee, or by the well at Nazareth, or upon the hill at Bethlehem, to be upon the Acropolis, in the shadow of the Parthenon, is surely the most overpowering. The scene alone would affect the most careless eye with delight, as you look one way to the Saronic Gulf, to Salamis and Egina; and another way along the verdant peninsula between Cephissus and Ilissus, to Hymettus, Lycabettus, and the purple range beyond which lie Marathon and Thermopylæ. The mild air has never lost that soft benignness of which Sophocles spoke; the olives, Pallas Athene's gift to Athens, beautify its plains and gentle hills with their green and silver; at the foot of the great rock of Cecrops basks in the sunshine the little city—white and red-roofed—which, in some form or other, has been there

since fifteen hundred years before Christ. Much has been taken from the "City of the Violet Crown," but enough is still left to overwhelm the observant eye and mind with a sense of the commanding mastery of the Greek genius in Architecture and Glyptic Art.

A MEETING IN ST. JAMES'S PALACE.

AT the meeting organised on behalf of the School at Athens, and held in St. James's Palace, the Prince of Wales said: "I have called you together to consider with me the interests of the British School at Athens, an Institution in the existence and welfare of which I have been much concerned from the very outset; and which I am convinced is of the highest importance to Classical study in this country, and, therefore, to the education of the Queen's subjects and the advancement of learning. The School was established twelve years ago. A fine plot of ground was generously granted by the Greek Government on the slopes of Lycabettos. With the funds which had been subscribed at our first meeting a house was erected, designed by the first director, Mr. Penrose. In the Library and Reading Room of this building meetings are held in which problems of Classical learning are discussed; the students are guided in their studies by the directors; and it serves as a rallying-place not only for all special enquiries into Classical subjects, and for Artists and Architects, but also for the number of British travellers who seek the inspiration and knowledge which a tour in Greece inevitably suggests. I am assured by competent authorities that a large number of 'advanced' Students coming from our Universities have continued and completed their studies at our Athens School with the greatest profit, and that these graduates have produced original work which has commanded the approval and respect of foreign scholars. We can all understand how such work, pursued on the very soil of ancient Greece, acts as a practical supplement to the more theoretical studies in our Universities at home. It appears to me to supply to our young pupils what active service abroad or on the high seas gives to soldiers and sailors whose training has been confined to parade grounds or harbours. Besides the useful service it performs of giving the finishing touch to the education of our scholars, remarkable advance has been made by the School in original research, exploration, and excavation. Of this, those who are competent to speak, will tell you more. Where all have done such good work it would be invidious to single out a few names. But I must draw your special attention to the names of the first director, Mr. Penrose, the present director, Mr. E. A. Gardner, and to the successful efforts of the Chairman, Secretary, and Treasurer of the Managing Committee here. Nor must I forget Professor Waldstein, of King's College, Cambridge, who has helped us so much in various ways." The Prince then referred to the grants made by the French, German, and American Governments, spoke of Sir William Harcourt's offer (already indicated), and, after acknowledging the proffered help of the Universities, appealed also to the liberality of private individuals, which, in this country, had never flagged. A number of preliminary resolutions having been passed, Sir F. Leighton proposed, "That this meeting pledges itself to use every effort to place the School upon a sound financial basis, so that in point of dignity and efficiency it may worthily represent this country among the other foreign Institutes in Athens." He said he must only speak very briefly in support of the resolution in consequence of the injunctions of those very tyrannical persons, his medical advisers. To no cause, however, would he give his assistance more readily or more eagerly than to that which they had met to advocate, because it was in a great degree bound up with the Profession to which he had devoted his life. He was delighted to see His Royal Highness in the chair, because his presence there and his generous gift to the funds of the School testified how deep an interest the Prince of Wales felt in the undertaking.

THE Guardians of Eastry, Kent, have approved a scheme for alterations to the Workhouse at a cost of £3,200.

AN ANCIENT CALEDONIAN HILL FORT.

BUILDING BEFORE THE LIME PERIOD.

AN antiquarian discovery of extraordinary interest has been made near Overtoun Castle, Dumbartonshire, the country residence of Lord Overtoun. An ancient Caledonian Hill Fort has been laid bare by excavation on the summit of Dumbowie, one of three well-known landmarks in this part of the ancient Colquhoun county—Dumbuck, Dumbowie, and Dumbarr. The find is the result of the researches of Mr. John Bruce, F.S.A.Scot., and Mr. W. A. Donnelly, Artist, both of whom, by their recent discovery of what Dr. Anderson calls one of the most important groups of rock sculptures hitherto discovered in Scotland, had already won the appreciation of archaeologists. The present find has been sprung as a surprise on all who have known this hill for the last 50 years or more, no evidence of the building being visible. The workmen engaged on the excavation have up to the present laid bare the walls of the Fort to one-third of their circumference. Their ascertained height inside is about 5 ft., descending on the outside curve to a depth of 32 ft., with a base at least 30 ft. thick, ascending to a breadth of 4 ft. thick at the top. The stones are laid in courses without mortar and very little earth, the outside course being laid like slates, one on the top of the other. The stone is freestone, or white sandstone, while the rock on which it is built is hard whinstone. What of the building that has been left standing and at present laid bare is of a methodical style, showing evidence of a practical knowledge of building as practised before the Lime Period. Further developments of importance are expected. Up to the present the productions have been intensely black organic earth, earthy matter mixed with rust, 40 or 50 broken bones, and pieces of charcoal. The above were found below the level of the original floor, and near the living rock. Under a slab of freestone also a necklace of what appeared to be paste or clay, strung on a thread was discovered. The bones were got at opposite sides of the enclosure, and in each case smoothed pieces of quartz were found, placed round the bones as if by design. The Helensburgh Antiquarian Society are taking interest in the matter, Mr. Bruce, Mr. Wymess, and Mr. Miller, of that Society, giving assistance to the excavators, and guiding the work to a practical issue. They are also in correspondence with the parent Society in Edinburgh, so that a proper value may be placed upon the find. Mr. Donnelly has men engaged to execute a series of drawings of the scene and the developments. The side of the Fort commands one of the finest views in the kingdom—from Ben Lomond to Goatfell, from Argyllshire to Perth, with the whole valley of the Clyde—while at its feet is the ancient Royal Burgh town of Dumbarton and Castle Rock; to the east, the Auchintorlie heights and Long Craigs; while at its base are the policies of Overtoun and Barnhill, Milton Glen, and Barnhill Dam, a lovely sheet of water. The present indications give hope for further developments of a most interesting kind.

COVENTRY HALL, the ancient seat of the Earls of Coventry, at Stréatham, has been purchased by the nuns of St. André of Tournai, who will in a few weeks open it as a School. The Belgian nuns have also already commenced to build large Schools in the parish for the daughters of the Roman Catholic working classes.

AT Bournemouth, the Town Council has resolved that plans and estimates of the proposed new Cemetery shall be prepared at once; and that a new Fire Station be erected at a cost of £800.

TO-MORROW the Memorial Stone of the Tower of Emmanuel Church, Compton Gifford, will be laid. Of the £3,500 which the Tower will cost, one-half has still to be raised, and the Spire is estimated to cost an additional £1,600 or £1,700.

A NEW School, erected by the Independent Methodists at a cost of £320, has just been formally opened at Wingates, Westhoughton, near Bolton.

THE old Presbyterian Church in Fisher Street, Carlisle, has been reconstructed and enlarged. The total cost amounted to £3,400.

INDIAN ART AT EARL'S COURT.

AT Earl's Court, the Fine Art and Loan Section of the Empire of India Exhibition, is superior to the collections of former Exhibitions. It has the dignified air of a Museum, and the Collection is by no means badly arranged, its contents being seen without unnecessary trouble. These consist chiefly of Pictures in various mediums, Ornamental Designs of all sorts, Carved Woodwork, Pottery, Bronzes, Arms, Silver, Carpets, Brocades, and all kinds of Stuffs. We might class the exhibits as Pictorial Art and as Art applied to the Decoration of Objects; or, again, as really native Indian Art, and as European Art illustrating or in some way connected with India. If we take Pictorial Art first, we shall find European work by deceased and living artists alongside Indian work, old and indigenous as well as recent. Most of the pictures, whether passable or not as Art, have at any rate an interest apart from the æsthetic side, and are, generally speaking, valuable as documents for the instruction of those who have not been in India. Amongst pictures that one regards chiefly from the æsthetic standpoint, as if they were in the Academy, the most serious or the largest are to be found in the long list of works contributed by Mr. Edwin Lord Weekes, Mr. Nettleship, and Mr. R. W. Allan. Mr. Weekes, indeed, fills an entire room himself with sketches and with large pictures, some of which have attracted notice in the Salons of Paris. As naturally more than one Painter has depicted the same scene, the visitor learns a good deal from a comparison of the different renderings of such buildings, for instance, as the Taj Mahal at Agra, which has been painted by Mr. Weekes, Mr. Allan, Mr. Reginald Barratt, Mr. W. Duncan, and, last century, by Hodges on the commission of Warren Hastings. One room is entirely devoted to relics of the old East India Company, and the first Collection made in commemoration of the body which governed India both long and gloriously. A case containing pieces of plate presented to eminent Anglo-Indians is well worth mention. The race capable of presenting such hideous and ludicrous tributes to its illustrious men may be fitted to govern Orientals; it is certainly unfitted to guide their æsthetic instincts. These epergnes and candelabra are the justification of all the follies of the ultra æsthetic movement, all the gush and exaggeration of the Arts and Crafts Society. We will not say much about the pictures painted by Indians in European style, for they show us nothing new nor admirable. For beauty they cannot be compared to old native specimens of the Art of Illumination such as may be seen in the series of "Kings of Delhi." The Mooltan pottery, although neither ancient nor very original in colour and design, is another instance of bright effective colouring and bold simplicity of pattern. The improved ware produced under European instruction may be, and we believe is, of stronger and more durable substance, but it is sadly inferior in force and harmony of colouring. The tints are sad and neutral for the most part, and when a contrast is attempted its opposition is discordant. Most of the metal work in platters, bowls, vases, and other vessels, as well as in the ornamentation of arms and armour, shows a wonderful sense of beauty in shape and intricacy in pattern. The love of elegance has prevented the artist from overloading the better specimens with figured designs; indeed, however elaborate the pattern may be, it is not allowed to bury or deform the general proportion of the objects. The statuettes of gods and animals may be crudely constructed from our point of view, but the shape aimed at is always effective and decoratively conventionalised. Such a shield as 1,494 is not easily beaten for suavity of pattern by the work of any nation. The effect is rich, and yet, as considerable parts are plain, the pattern has an air of largeness and tranquility. Its border consists largely of the elegant cursive characters of Arabian or Persian writing.

Carved wood and ivory and metal form a good part of the Exhibition, and not the least charming, as will be admitted by those who look at the screens, doors, panels and figures, ancient and modern. But of all the decorative

work, ancient or recent, in metal or wood, nothing surpasses the Siva Shrine, a very old monument in brass and copper of the most severe and stately design. The invention of the fabulous animals and the rays which surround the god are beyond praise. The carving of the support is exquisitely soft and yet full of character, whilst the pillars and friezes introduced are all copied from very ancient Indian Temples at Tanjore and Madura.

AN OLD-WORLD ESSEX BOROUGH.

NO one can look at the fine Druidical medal found many years since near Moot Hall, Maldon, and then at the hill upon which the town stands, without feeling that the latter was a spot on which the Britons lived and worshipped long before the Romans were known in the land. There is, indeed, a tradition that Queen Boadicea did battle with the invaders on the lands lying to the northward, where the Railway Station now stands. It is certain, however, that from time to time the Romans occupied Maldon, that King Alfred stayed there while his men built Witham, and that the Danes besieged it again and again. But the square weather-stained fifteenth century Moot Hall is nearly all that remains of the historic past. For hundreds of years this building has been the Municipal Hall, the Court House, the Prison, for Maldon is an old-World little borough, with its curious charters and ancient privileges. It has its Mayor, Aldermen, Councillors, and Town Clerk, to say nothing of its Commission of Peace and Court of Quarter Sessions. Upstairs in the Munitment Room are yellow crinkled old parchments, some with great red seals, all with royal signatures. These are the charters granted to Maldon by successive monarchs. They begin with Henry II., followed by others, from Edward I. down to George III. Under the first, freemen were allowed curious exemptions from feudal service. They were relieved, for instance, from "danegeld," "carriage," "scutage," "tallage," "hostage," and similar other unintelligible taxes and services. Free toll in every English market and fair, and over every Bridge and road was likewise given them. They were exempt from the frequent calls to build or repair Castles and Causeways, from all foreign service, except for finding for forty days, at their own expense, one ship for the King's use whenever he found it necessary to wage war. During the reign of Queen Mary, Maldon had to provide a prison at the Moot Hall, and within the Liberty "tumbrel, pillory, and gallows." Tumbrel, pillory, and gallows have gone, but to remind evil-doers, nice bright polished steel handcuffs hang just inside the open door. According to Mr. Percy Lindley, the display of manacles or hand chains dates from the days when witches were common to the district. The imps, employed by the wise women to work their spells on neighbours' pigs and cattle, and batches of bread and brewings, found secure hiding-places in the Blackwater islands and salt marshes. Within the present century, spirits of one sort and another have been discovered in these haunted grounds, but hidden away in tubs, and run to earth by officers of her Majesty's Excise. As late as George II. witchcraft was a punishable crime. In the dark days of the Commonwealth, among Essex witches tortured or burnt to death in 1579, three Maldon witches were tried and roasted at Chelmsford. Inside the Moot Hall are hung portraits of Elizabeth and Anne, Charles II., George III., and Dr. Plume, Maldon's townsman and benefactor. From the roof one of the most beautiful views imaginable is to be obtained. Towards the east is the broad Blackwater flowing in great winding reaches to the sea, elsewhere is to be seen the Chelmer, to the west rise the dark heights of Danbury, to the north-east the high plateau of Tiptree Heath, and to the south the spreading waters of the Crouch, while further beyond still is the distant and glorious old Thames. Standing here one can easily understand why Saxons, Romans, and Danes made Maldon a centre and a fortress. During the restless tenth century the town must have been in the thick of the fight. For with the Danes established at Mersea, and hovering off the Essex coast,

Maldon was one of the first Saxon strongholds in the way of the Vikings on their inland incursions. Coming to 933, we are told that in that year Unlaf, with 93 ships, laid waste all the district round Staines, Sandwich, Gypswic (Ipswich) and Maeldun (Maldon). But while the history of the borough would fill volumes, that of the Dengie Hundred adjoining is even more interesting. Beeleigh Abbey is gone and forgotten, so is the city of Ithancester. A word or two as to the Blackwater—the glory of Maldon—may here be of interest. The river still rises and falls with the tide, as it did when the Romans were in the zenith of their power. Naturally its waters are salt, saltier than even the sea—16 miles distant—itsself. For a dip in the briny, then, there is no better than the Blackwater. Just below the town the stream suddenly widens and goes on increasing till at Bradwell the estuary is about four miles across. As yet its beauties have hardly been discovered, but ere long the Blackwater should be one of the many popular boating centres in England.

MY JOURNEY TO ATHENS.

A JOURNEY to Athens and back can be accomplished easily in three weeks, but you should give a week to the Acropolis itself. It was not until I was actually on the spot that I understood how beautiful Greek Architecture was, and how nearly it was allied in spirit to that of the thirteenth century. From that time I took a near view of the latter Art, and things which had before appeared arbitrary and confused became clear and logical. I saw the same mind working at Athens as at Chartres, but in a different climate, under different conditions, and with different material. I had been told that Greek Architecture was beautiful, but I could not believe it for I had only seen it represented in books, where the white columns were shaded until they looked like those thickly coated with soot on the outside of St. Paul's. It was impossible to believe that these things could be beautiful; but on the spot itself they were very different, and I saw that, dry bones as they were, the climate, which afforded the broad lights on their surfaces, and furnished the glorious blue sky which formed the background, made every difference. I also saw that each building was placed with the most consummate art, and turned exactly in the direction where it would be seen to the very best advantage from certain points of approach. Further investigations showed traces of the colour, which, by artfully designed ornaments, principally in bright tints and thin lines, softened down the intolerable glare of the white marble when first the edifice was built. It is a curious fact that colour thus applied upon a bright surface at a distance, not only, as might be expected, loses its individuality, but also gives a light tint of its prevailing colour to the marble. Of course there were other parts covered in great masses, such as the triglyphs, which would be seen as local colour even at a distance. From Mr. Penrose's book I learnt how, by almost invisible corrections of the lines of the Architecture, the same softness was given to a hard marble building as we see in a sketch. Everyone knows how a design always looks better in a sketch than it does in a careful drawing (I am referring to geometrical drawings), and how very often the building itself looks even harder than the geometrical drawing, especially if the latter is touched up with stone joints, real or imaginary. The Greeks were perfectly aware of this fact, and provided for it accordingly. B.

SOME criticisms having been raised as to the height of the Pedestal upon which Lord Strathnairn's Statue has been placed, it is interesting to know that Mr. Onslow Ford has, as a precedent, the Colleon Statue at Venice, which is placed at exactly the same elevation.

THROUGH the sinking of a caisson of the great Bridge in course of construction at Nag-el-Hamad, Egypt, forty workmen recently lost their lives.

A MEMORIAL is to be fixed in Llandaff Cathedral in recognition of the brave deeds of the old 41st—the Welsh Regiment. On the tablet will be inscribed the honoured names of the officers who fell in the Crimea.

Professional Items.

ASTON, BIRMINGHAM.—The Guardians of the Aston Union have appointed the first premiated Architects in the recent competition for Cottage Homes, Messrs. Franklin Cross and J. R. Nichols, of Union Chambers, Temple Row, Birmingham, to carry out the work. The Architect's estimate for the Homes was £25,200. The scheme embraces Homes for Boys and Girls, Probationary Home, School, Place of Worship, Infirmary, Workshops, Swimming Bath, Bakery, Stores, Superintendent's House, Fire-engine Station, &c., which will be erected upon a site near the Gravelly Hill Workhouse.

BARNSELY.—Some time ago the Barnsley Salvation Army Citadel Company (Limited) was formed, and the result was that a site was bought in Wellington Street for about £450, and a new Barracks is now in course of erection, from the designs of Major Gordon, which will cost about £2,200, and accommodate 850 worshippers in the main building, whilst the smaller meeting place in the rear will accommodate about 200 children. It is built of brick, with stone dressing, Mr. Henry Burrows being the contractor.

BEBINGTON, CHESHIRE.—The new Wesleyan School Chapel at Bebington, was opened on Thursday last. The works have been carried out by Messrs. W. H. Bleakley & Co., of Birkenhead, from plans prepared by Mr. T. Taliesin Rees, also of Birkenhead. The contract was £930, furniture and fittings, £100. The building is faced with red pressed bricks, relieved with white Storeton stone dressings. Woodwork, pitchpine. The windows are filled with Cathedral lead lights. The design is Late Gothic. The accommodation includes School Chapel for 300 persons, two Vestries, w.c., Lavatory, Heating Chamber, &c. The above is the first portion of a large scheme, the plans of which have been prepared by Mr. Rees, and includes a large Chapel, Vestries, &c., to cost about £3,000.

BIRMINGHAM.—The autumn meeting of the Iron and Steel Institute will be held at Birmingham from August 20th to 23rd. The Mayor of Birmingham will hold a reception in the City Council House on the evening of the first day.

Bow.—For a new Science Wing to their Schools in Tredegar Square, Bow, the Governors of the Bow and Stepney Foundation have selected from a limited competition the designs of Messrs. T. Chatfield Clarke & Son. The addition will be fitted with all modern improvements and is to be commenced at once, Messrs. J. & J. H. Cocks having secured the contract.

BUXTON.—On Wednesday morning Mr. A. Blomfield, son of Sir Arthur Blomfield, met the Churchwardens of the Parish Church to consider the proposed restoration of Buxton Parish Church. Mr. Blomfield produced and explained a sketch plan which shows how a new Chancel could be added and seats provided for the choir. Sir Arthur Blomfield has been asked to submit the approximate cost of carrying the work out.

CASTLEFORD.—Plans and designs by Mr. Geo. F. Pennington, Architect, Castleford, have been approved by the Building Committee for new Wesleyan Sunday Schools and Church Buildings, proposed to be erected in Wesley Street, Castleford. The buildings are designed in the Renaissance style, and are to be built of local bricks with stone dressings.

DEVONPORT.—The Spire at St. Mary's Church, Devonport, which is in an insecure condition, is about to be restored from plans by Mr. Henry C. Luff, of that town, who has given his services.

DUMBARTON.—The committee has decided to give a commission to Mr. Hamo Thornycroft, R.A., of London, to execute a life-size statue in bronze of Dr. Denny, as also a suitable pedestal for the same. The statue of the distinguished shipbuilder will be erected in the Burgh of Dumbarton.

DUNDEE.—Plans have been passed for a large undertaking at Victoria Road by the Committee of the Dundee Town Council. The buildings consist of fifteen tenements of dwelling-houses. The newest improvements in sanitary fittings will be introduced. Large open spaces have been left for thorough ventilation. The elevations show oriel windows on the main frontages, with two towers flanking the principal corners at Victoria Road. The erection of the buildings will be proceeded with at once, but it is expected that this will occupy two years, although about one-half will be got ready for Whit-Sunday next. The entire buildings, which will cost upwards of £20,000, are to be erected from plans by Messrs. McCulloch and Jamieson, Architects.

EAST BUDLEIGH.—A stained glass window of some historical interest to the Electrical World has been placed in the pretty Church of East Budleigh, commemorating as it does the laying of the first telegraph cable between this country and America. The subject chosen for illustration is "Christ stilling the tempest." The memorial inscription is as follows: "In memory of Vice-Admiral George William Preedy, C.B., who, when Captain of H.M.S. Agamemnon, with the Captain of the U.S.S. Niagara, successfully laid the first Atlantic cable uniting Europe and America in 1858." The window is the work of Mr. F. Drake, of the Close, Exeter.

EDINBURGH.—The Prudential Assurance Company has obtained a warrant to take down the London Hotel, a large edifice at the south-east corner of St. Austin Square. The Architect for the new building is Mr. Waterhouse, R.A., and the work is proposed to have an exterior carried out in terra-cotta details. If so, it is to be hoped that the colour will be something more consistent with the grey stone around it than the usual brick red. The tenements of this square have been in great part altered from the original design, which was, like that of Prince's Street, very commonplace, with the exception of the Royal Bank.

EPSOM.—For the purpose of laying the foundation stone of the new lower School which is about to be erected, from designs by Sir Arthur Blomfield, A.R.A., as an addition to the Royal Medical Benevolent College, the Prince and Princess of Wales paid a visit to Epsom last week.

EVERTON.—The Foundation Stone of a new Lending Library, Reading Rooms, and Technical Class Rooms in St. Domingo Road, Everton, has been laid. The new building will contain a Lending Library, a large Newsroom and general Reading Room for men, and separate rooms for women and boys, all of which the Committees hope to make thoroughly comfortable and attractive. On the upper floor and in the basement accommodation is provided for various Technical Classes.

EXETER.—A new Class Room, erected for infants at St. Sidwell's Church Schools, Exeter, has been opened. The room is capable of accommodating between 60 and 70 children. The Architect is Mr. Jerman, and the contractor Mr. G. E. Saunders, both of Exeter.

FORD.—A new High Altar, from designs by Mr. Pugin, has just been erected in the Catholic Convent Church at Ford, in the Liverpool diocese.

GRANGE-OVER-SANDS.—The Grange-over-Sands Congregational Church is approaching completion, to the designs and under the superintendence of Mr. E. Howard Dawson, Architect, of Lancaster.

KILBURN.—The Committee of the new Unitarian Church to be erected in Kilburn, has selected from a limited competition the designs of Mr. Howard Chatfield Clarke, of Bishopsgate Street Within. The design is for a Church to seat 400, with a Congregational Hall and Offices attached.

LANDRAKE.—A new Wesleyan Chapel was

opened here on Wednesday. Just twelve months ago the four Memorial Stones were laid, but the progress made was slow owing to the severe winter, and the outside of the structure is scarcely complete yet. The Chapel, of local limestone with red brick dressings, adjoins the northern side of the old Chapel. It has a Nave and two Transepts, and the pitchpine wood open benches will seat 150 people. The old Chapel is to be converted into Sunday School Class Rooms, and has folding doors opening into the new building, the Pulpit being so placed as to command a congregation in both buildings. The Chapel, about 50 feet by 30 feet, was designed by Mr. S. P. Hosking, built by Mr. T. Hawke, and fitted by Mr. J. Churchward.

LIVERPOOL.—Dr. Whiteside, the Roman Catholic Bishop of Liverpool, recently laid the foundation stone of Schools which are to be erected in connection with St. Charles' Catholic Church, Aigburth Road, Liverpool. The new school premises will accommodate 150 children, the dimensions of the building, which is to comprise School Room, Class Rooms, and Cloak Room on one floor, being 46 feet by 44 feet. Messrs. Sinnott, Sinnott and Powell are the Architects, and the contract is let to Mr. Fogarty, Old Swan, the estimated cost being £980.

LONDON.—Last week the Duchess of Teck formally opened the imposing building in Great Ormond Street, Bloomsbury, which will henceforth be devoted to the growing work of the London Homœopathic Hospital. The foundation stone was laid in June, 1893, and on all points the internal requirements of scientific Hospital construction have been considered in preference to external Architectural effect, but, notwithstanding this, the Architect, Mr. W. A. Pite, has designed a structure which is a distinct acquisition to the neighbourhood. Upon the purchase of the site and the erection and furnishing of the building an expenditure of £45,000 has been contemplated, and the present amount of the building fund is £35,000.

NEATH.—The new Bank premises which are now being erected for the London and Provincial Bank at Neath, on the site of their old offices in the Parade, when completed will form an imposing and striking feature of Architectural merit. The plans, which have been prepared by Messrs. Wilson and Moxham, Architects, Swansea, were selected in competition, and the design shows that they have given every consideration and care in planning the Bank to make it convenient and artistic in every detail. The Façade to the Parade and side road is built of boxground stone. The Entrance to the Bank Chamber is in the centre, and forms a bold relief. On either side are projections which are carried up on the first and second floors with Corinthian columns, terminating with a heavy cornice, which runs round the building. On the ground floor are the Bank Chamber, with Manager's Room, Lavatories, Strong Rooms, and Muniment Rooms. There are also the Manager's Dining Room, Kitchens, and offices on this floor. The two floors above are devoted to the use of the Manager. The contract is let to Mr. Abraham George, of Neath.

NEWPORT (SALOP).—On Thursday a public enquiry was held before Assistant-Commissioner Coore, with reference to the proposed removal of the Grammar School to a new site offered by Sir Thomas Boughey. A resolution which had been passed unanimously by the Urban Council was handed in by Mr. Dickenson, the chairman, in favour of the proposal, and that was the only formal resolution laid before the Commissioner. The only definite opposition was raised by Mr. Barrow, whose reason was that an architectural and historical feature of the town would be removed to where it would not be seen.

PONTYCLUN, GLAMORGANSHIRE.—The new Church of St. Paul's, Pontyclun, is built in a late period of Gothic Architecture, and consists of a Nave, with a Chancel, Vestry, and Organ-chamber. Accommodation is provided for 350 people. The walls are built of local stone,

with Bath stone dressing, and the windows are all built with traceried heads. The main walls are grey, and the roof is of green slate with red tile ridges, surmounted by a bell-cote furnished with two bells. The walls inside the Church are coloured buff. The contractor was Mr. John Morgan, Llantrisant, and the work has been carried out under the superintendence of Mr. E. M. Bruce-Vaughan, the Architect. The cost is £1,500.

ROCHDALE.—At a meeting of the Rochdale Town Council, the Chairman of the Paving and Sewering Committee reported that the Local Government Board had given sanction to the Corporation for the borrowing of £40,000 on condition that extra land could be had at its Sewage Farm, and if they had permission from the Railway and Canal Companies to make the sewers under the railway and canal. They had obtained the consent of both companies, and had engaged Mr. G. F. Deacon, C.E., of Westminster, to superintend the work required in carrying the Sudden Valley Sewer under the Rochdale Canal. Mr. H. G. F. Barham, of Pontypridd, had been engaged to act as resident engineer.

STAFFORD.—Memorial Stones of the new Baptist Chapel, in Lichfield Road, were laid on Wednesday last. The new Church is being built from designs prepared by Mr. E. Harper, Architect, Brimingham, and the work is being carried out by Mr. G. H. Marshall, of Smethwick. It is proposed to erect a Church and Schools on a commanding site in Lichfield Road, hitherto occupied by a number of tumble-down straw-thatched Cottages. The buildings will be in the Tudor-Gothic style, with bricks and stone dressings; but the Spire will be of stone, with open tracery. The Church is to accommodate 310 persons on the ground floor, while in a Gallery over the Main Entrance room will be provided for 115 more. There will be a large Church Parlour, a Deacon's and a Minister's Vestry. The School-room will accommodate 250 scholars on the ground floor. There will be six Class Rooms, four of which will be divided from the Central Hall by movable partitions. Provision will be made for an enlargement of the School accommodation, if necessary, at any future time. The Church will be heated with hot-water pipes on the low-pressure system, and it is expected that the electric light will be installed.

STRETTON.—The Foundation Stone of a new Church to be built at Stretton, near Burton, the entire cost of which, estimated at over £15,000, is to be defrayed by Mr. Gretton, was laid recently. The Architects are Messrs. Somers Clark and Micklethwaite, of Westminster, and the builder is Mr. Halliday, of Stamford. The Church is to accommodate over 400 worshippers.

WAKEFIELD.—At a recent meeting of the County Council it was resolved to repair Harewood Bridge, at a cost not exceeding £1,200; and Brotherton Bridge (on the Doncaster and Tadcaster main road) at a cost of £300. The salary of Mr. William Holmes, the county sanitary inspector, was increased from £175 to £200 per annum; and to make application to the Local Government Board for sanction to borrow £5,000 for the purchase of a site and the erection and furnishing of a Police Station at Castleford, and £1,500 for the erection and furnishing of a Petty Sessions Room at the same place.

WALSALL.—The Walsall Town Council has accepted the tender of Mr. R. M. Hughes for the erection of Public Baths in Lichfield Street, in accordance with plans and specifications by Messrs. Bailey & McConnell. The contract price is £6,971.

WESTHOUGHTON.—At a meeting of the Westhoughton Burial Board, held on Monday, July 8th, the contract for the formation of new Cemetery and erection of Public Conveniences, Draining, &c., was let to Mr. Wm. Pollitt, Bolton, at £650. The work has been commenced, and is being carried out from the plans and under the direct supervision of T. Greenhalgh, Surveyor, Nelson Square, Bolton.

SOCIETY MEETINGS.

The Liverpool Engineering Society in Wales.—A large party of the members of this Society has paid a visit to the Dinorwic Slate Quarries, Llanberis, and the Snowden Mountain Rack Railway. The party was accompanied by Professor H. S. Hele-Shaw, M.Inst.C.E., the President of the Society.

Royal Scottish Society of Arts.—A meeting of this Society was held last week in the Hall, 117, George Street, Edinburgh. The Society proposes to offer for competition a Keith prize of £50 for improvements in electric energy meters for domestic supply. Competitors will be expected to submit, in addition to a descriptive paper, accompanied by detailed drawing, a working meter adjusted for a mean pressure of 115 volts, and suitable for a house in which the minimum number of Watts being taken at any time is 4,000. Special importance will be attached to the minimum load at which the meter can register correctly, and to the energy absorbed by the meter when the consumer is using a light load, or when no energy is being taken. Conditions of the competition were discussed and adjusted, and it was agreed that the award should be made during the session of 1896, the Society reserving right to withhold the prize in the event of there being nothing deserving the award. Alternatively, the Society may award a smaller amount should anything meritorious, but not deserving the full prize, be sent in.

Derbyshire Metallurgical and Engineering Association.—A well-attended meeting of the members of this Association was recently held, when an interesting paper was read by Mr. W. J. P. Burton, Science lecturer, upon "Crich Hill" geologically. This remarkable mass of rock, Mr. Burton stated, formed one of the most striking landscapes within a radius of ten miles; its peculiar dome-like shape, and the tower-like structure on its summit, made it a striking figure. The paper was illustrated by diagrams, photographs, and an exhibition of mineral specimens and fossils.

National Registration of Plumbers.—The Annual Meeting of the Sheffield centre of the National Registration of Plumbers was held on Thursday evening, at the Town Clerk's Office. Mr. Charles Hadfield, F.R.I.B.A., presided. The election of officers and public representatives for the ensuing year was first proceeded with, Mr. C. Hadfield being elected chairman, Ald. W. H. Brittain, vice-chairman, Mr. H. Waddilove treasurer, and Mr. J. B. Mitchell-Withers honorary secretary. The following were elected public representatives for the coming year:—Sir H. Stephenson, Dr. Littlejohn, Professor Hicks, Professor Ripper, Messrs. E. M. Gibbs, C. F. Wike and J. D. Webster, Dr. A. Jackson, the Mayor and the Master Cutler. These, with twelve master plumbers and twelve operatives, form the Council for the coming year. Alderman Hind, a member of the Plumbers' Company, and Chairman of the Hospital, Health, and Parks Committee of the Stockton Town Council, gave a very interesting address. He referred to the old organisation of the Company, and the great benefits that had accrued from the action they had taken, at very considerable expense, in establishing centres throughout the country. He said that the country centres might say, "Why should we send a portion of our money to London, to be dealt with by the central organisation?" As a matter of fact, the Plumbers' Company, since the movement was established in 1886, had spent over £10,000 out of its funds in furthering the objects of the Association, and Sir Stuart Knill, the late Lord Mayor and Master of the Company, had spared neither time nor trouble in furthering the interests of sanitary work. He urged that this centre should do all it could to increase the interest in technical teaching.

Sheffield Art Society and Sketching Club.—The monthly meeting and Exhibition of this Club was held in the Rooms, Tudor Place, on Thursday night. Mr. Frank Saltfleet presided, and a number of members were present, with their work done at the sketching trips to Padley Woods during the past month. About forty pictures were on the screens and

easels. Mr. Saltfleet was represented by a large watercolour of Padley Brook, with rocks, trees, ferns and water exquisitely painted. Also four large sketches of other districts, all of which showed a masterly touch and a wonderful tone. Most of the other pictures were of brook and rocks in Padley Woods, and exhibited a marked improvement in the general work of the members. The following were represented:—Messrs. Willis Eadon, W. B. Hatfield, Linley, Hunt, Holland, Backhouse, Loxton, Redfearn, Hemsworth, Fidler, Hall and Brady.

The Cymmrodorion Society.—This Society, established for the encouragement of Literature, Science and Art, as connected with Wales, gave a conversazione and concert on Thursday evening, in the galleries of the Royal Institute of Painters in Water Colours, Piccadilly. The entertainment was attended by about 300 of the members and their friends.

SAWDUST.

ERECTED on a site given by Lord Mostyn in East Llandudno, the Duke of Clarence Memorial Church has been opened. £5,000 or £6,000 more is still required to build a Chancel, Aisles, Tower and Vestries.

A MEMORIAL CHAPEL and Vestry have been opened at St. Mary's Church, Dover.

THE London County Council is considering a proposal for lighting the Victoria Embankment and Waterloo and Westminster Bridges, at an estimated cost of £16,590.

THE Church of St. Mary Magdalene, Rodborough, near Stroud, is undergoing restoration, and the Foundation Stones of the new Chancel and extension of the North Aisle have already been laid.

THE new Technical School at Preston will cost about £16,000, independently of fitting and furnishing. The design provides a Shed for classes in Weaving and Designing, with space for 80 hand looms and 20 power looms in motion, with rooms for all the preparatory processes; a Shed for cotton spinning machinery, a Lecture Room, &c. The building will also include an Agricultural Department.

AT Nelson, the Baptist Denomination has purchased a site near the present Chapel, on which it is intended to erect a Sunday School capable of holding 1,000 scholars. The Chapel is also to be enlarged and made capable of holding 350 more worshippers. The total scheme will involve an outlay of £5,000.

SALCOMBE Waterworks, recently opened, are of an extensive and most complete kind, and able to supply a town of much larger dimensions than Salcombe. The new high level Reservoir is on the highest land in the district, called the Berry, and is 50 ft. long by 30 ft. wide and 10 ft. deep, and is closed in with 4½ in. brick arches in cement on rolled iron girders, and holds over 80,000 gallons. The works have cost over £3,600, and have been carried out by Mr. Jenkins, Contractor.

THE Ossett Town Council proposes that a bill be promoted in the next session of Parliament for the purpose of acquiring the works and plant of the Ossett Gas Company, and also to enable the Corporation to establish an electric lighting plant.

AT Sefton Park, Liverpool, two Wafer Fountains have been built, which consist of about a dozen jets each, and will prove a great source of attraction to visitors. It is intended to erect two Fountains in Stanley Park, and also one in St. Peter's Gardens.

THE Malcolm Collection of Drawings and Engravings by the Early Masters, now at the British Museum, has been offered by Colonel Malcolm to the Trustees of the Museum for £25,000, and the Treasury, on the recommendation of the Trustees, has agreed to the purchase.

A LARGE new Signalling Cabin at Waverley Station, Edinburgh, has just been brought into use. It has about 200 levers, and is one of the largest in Scotland. There are believed to be half-a-dozen larger in England, including that in the Central Station, Newcastle.

SOME improvements have been lately carried out at Frogmore Lodge, which is officially regarded as being part of Windsor Castle. A rustic Tea Room has been built in the grounds, which is both comfortable and picturesque, in which the Queen now breakfasts every morning.

The Builders' Journal COMPETITIONS.

No. 4.—A Village Church.

Designs are required for a Village Church to seat 200 people. The site is a hill-side, rising one in twenty from North to South, and situate in a stone country. The cost is not to exceed £2,500. Drawings to be submitted on or before Monday the 22nd of July.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

SAWDUST.

MR. F. GRIFFIN, of the National Art Training School, and formerly of the Glasgow School of Art, has been appointed, out of 200 applicants, to the post of Art Master at the new Technical Schools at Bath.

THE American Sculptor, W. H. Rhinehart, left a legacy to the Peabody Institute of Baltimore that now amounts to about one hundred thousand dollars. The Trustees of the Institute have determined to use this fund for the establishment of a School of Sculpture in connection with the Institute.

THE great chimney attached to Murphy's Chemical Works in Vauxhall Road, Liverpool, is considered to be the second highest in the country. On Tuesday there was considerable interest shown in many parts of the north-end of the city, owing to the fact that workmen were seen to be engaged almost at the top of the chimney. Ladders had been fixed up the whole height, and viewed from a distance they looked like lines of thread, while the workmen resembled nothing more bulky than knots tied in the thread. Near to the Chemical Works some hundreds of people were gathered watching the dangerous altitude at which the "chimney jacks" were engaged.

ON Tuesday last the new Infirmary block at Aston, Birmingham, which has been recently erected at a cost of £10,000, was formally opened by the Chairman of the Board of Guardians (Mr. A. Taylor, C.C.). The new building, which is a three-storeyed one, contains six Wards, two on each storey, each 84 ft. long, and Six Separation wards, and to each of the large Wards have been added a Bath Room and Lavatory. In the centre of the building is a large stone staircase, and at either end of the building is an iron fire-escape staircase, accessible from each Ward. The wards will accommodate 163 inmates, and the estimated cost per bed per annum will be about £60. The building is an improvement on the old Infirmary block.

A NEW Mission Church was opened on Thursday at Heck, a small hamlet in the parish of Hensall, between Pontefract and Goole. The total expenditure has been about £600.

ALTHOUGH the proposed Street Clock Tower has not yet taken shape at Tunbridge Wells as a memorial to its late distinguished Vicar, Canon Hoare, a less pretentious but equally beautiful Memorial Tablet has been erected at Holy Trinity Church. It is placed on the south wall of the Chancel, and is of polished alabaster with linings of Devonshire marble. The design is by Mr. Egbert Cronk, and the Tablet is 10ft. 6in. by 4ft. 6in.

Trade and Commerce.

The Sky Sign Nuisance. A Case Dismissed.

—The representatives of the Savoy Hotel (Limited) recently appeared at Bow Street Police Court to a summons issued at the instance of the County Council, charging them with unlawfully retaining a sky-sign without the licence of the County Council, contrary to Section 128 of the London Building Act, 1895. Mr. Chilvers appeared for the Council, and Mr. Marshall Hall for the Company. Mr. Chilvers described the sign to which exception was taken, and argued that it was a sky-sign within the meaning of the law. He called Mr. George Townsend, a Surveyor in the employ of the Council, who said that the sign was fixed to the roof of the Savoy Hotel. It consisted of a series of boards in three sections, to which large embossed glass letters were attached. The letters, which were about 7 ft. high, formed the words "Savoy Hotel and Restaurant," on three different sides of the Hotel. The sign was fixed to the roof and chimney stacks. Witness, in reply to Mr. Hall, said he had heard that the sign as it now appeared had been suggested by the District Surveyor. Mr. Marshall Hall said the large letters, "Savoy Hotel and Restaurant," were originally put on the roof of the Hotel as a protection for the servants when duty or pleasure took them there. It was a dangerous roof, at a high elevation, and some protection was required. Originally, these letters had nothing but the sky behind them, and they undoubtedly formed a sky-sign. Then the District Surveyor suggested that a board should be put behind the letters. This was done, and he urged that the letters as they now stood were not a sky-sign within the meaning of the Act. It was perfectly clear that the object of the Act was to protect the public against dangerous and unsightly signs. In this case the sign was neither dangerous nor unsightly. It was an advertisement certainly, but not a sky-sign. It had been said that in certain parts the sign was slightly raised from the roof, but that was merely to let rain-water run away. Mr. Chilvers admitted that there were a great many cases similar to this. It was a case of considerable importance, and he wished to quote Mr. Justice Mathews as to the object of this Act. Mr. Vaughan said that was unnecessary. The preamble was sufficient to show the object of the Act, which was directed against the dangerous and unsightly sky-signs popular a few years ago. In his opinion, this structure was neither unsightly nor dangerous. Nor, in his opinion, was it a sky-sign in the popular acceptance of the term. He considered, therefore, that he would be going contrary to both the spirit and the provisions of the Act if he accepted the contentions of the County Council. He, therefore, dismissed the summons. On the application of Mr. Hall, the magistrate, Mr. Vaughan, allowed £5 5s. costs. He refused to state a case for the opinion of the High Court, and this decision he adhered to when Mr. Chilvers repeated his application.

The Joiners' Strike at St. Helens.

—His Honour Judge Collier, who last week heard the case for both the master builders and joiners of St. Helens, has given his award. The position remains unchanged, with the exception of rule 11, which states that notices shall expire on the 1st May. His honour alters this rule so that the notices expire on the 1st September. A satisfactory solution of the difficulty will, doubtless, be found in the award.

Messrs. W. & R. Leggott.—Most of our readers, says *The Building News*, know the firm of Messrs. W. & R. Leggott, of Bradford, and High Holborn, London, manufacturers of fan-light, skylight, and roof-light openers, mortise locks, door furniture, fire-brasses, brass hand-rails and fittings generally used in the building trades. Architects, especially, have long been aware that everything is made and fitted on the premises, starting from the raw material to the finished article. The firm has earned a well-deserved World-wide reputation for goods. All the details are watched by practical men. In the Foundry, the Machine Rooms, Fitting Shops, the Polishing Rooms, the Lacquering and Japanning Rooms, the Annealing Room, and

the Warehouse, honest work and skilled intelligence control everything. The men employed in the Factory have nearly all been brought up and trained from boys in the works. At four o'clock every afternoon the men are all supplied with tea at the firm's expense. The Shops are well lighted and ventilated, and the comfort of the workers is studied throughout. For the past ten years the business has been steadily increasing, the receipts to June having been much larger than any previous year since the business was first established. Messrs. Leggott have just turned their business into a limited company, but, as in the majority of cases where the business is a really good thing, it is not offered to the general public; all the shares are in the hands of the proprietors, employees and friends. The share capital is £30,000, in £5 shares.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ALNWICK.—Accepted for alterations and additions to Jubilee House, Alnwick, for Mrs. Smart. Mr. George Reavell, Jun., architect:—

Armstrong, John, Lesbury, masonry ...	£58	0	0
Forster, W., and Son, Alnwick, joinery ...	73	0	0
Purdie, Jos., Alnwick, slating ...	7	15	7
Reavell, J. N., Alnwick, plumbing ...	38	16	0
Pickard, Geo., Alnwick, plastering ...	25	7	6
Robertson, A., Alnwick, painting ...	6	14	0

£209 13 1

ALNWICK.—Accepted for the erection of house at East Acres, Alnwick, for Mr. David Elliot. Mr. Geo. Reavell, Jun., architect:—

Scott and Thompson, masonry.	
Nettleship, Charles, joinery.	
Purdie, Joseph, slating.	
Wilkin and Dickman, plumbing.	
Davison, Robert, plastering.	
Jackson, George W., painting.	
(All of Alnwick.) Total, £358 2s.	

BLYTH.—For the erection of villa residence at Marine-terrace, Blyth, for the executors of the late Ulrik Fredrik Arveschong, Consul. Mr. W. E. L. Thompson, architect and surveyor, Waterloo, Blyth:

Lowan, T., Catherine-street, Blyth ...	£650	0	0
Macfarlane and Co., Trotter-st., Blyth ...	606	0	0
Heatley, J. W., High-st., Blyth ...	593	0	0
Phalp and Bird, Lynn-st., Blyth ...	560	0	0
Leiburn, Wm., Simpson-st., Blyth* ...	520	0	0

Add for provisional sums, £53.

* Accepted.

BOURNE (Lincs.).—For additions, &c., to house, Hacconby, for Mr. Brown. Mr. F. G. Silcock, architect, West-street, Bourne:—

Bloed, A. T. ...	£673	0	0
Chappell, Hy.* ...	480	0	0
Gelsthorpe and Sons ...	450	0	0
Wright and Wall ...	406	19	0

[All of Bourne.]

* Accepted subject to revision.

CAMBORNE (Cornwall).—For the erection of school buildings, College-row, Mr. S. Hill, architect, Symon's-terrace, Redruth:—

Julian, Jas. ...	£2,684	0	0
Colliver, John ...	2,475	0	0
Nettle, R. ...	2,440	0	0
Mills and Turner ...	2,415	0	0
Trounson and Turner ...	2,312	3	0
Carcke, A. ...	2,266	0	0
Moyle and Mitchell, Chacewater and Leedstown* ...	2,044	0	0
Mills, E., and Son† ...	926	0	0
Hodge, C.† ...	905	0	0

* Accepted. † Carpentry only.

CLACTON (Essex).—For paving, &c., Wellesley-road, and three others, for the Urban District Council. Mr. A. R. Robinson, surveyor, Town Hall-buildings, Clacton-on-Sea:—

	Wellesley.			Jackson.			Edith.			Coach.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Linzell, H. J.,	2,880	0	0	930	0	0	560	0	0	292	0	0
Glenny, H. W.	2,677	11	0	936	10	0	540	5	0	294	17	0
Wimpey, Geo., and Co.	2,672	6	2	927	19	0	531	8	1	349	17	8
Adams, Thos.	2,643	16	2	938	6	6	531	7	0	311	18	9
Allen, J. C.	—			1,230	0	0	680	0	0	275	2	6
Mackenzie, D., Clacton*	2,339	13	6	824	13	3	475	10	0	267	4	6
Rackham, G.†	2,115	0	0	647	10	0	394	12	8	293	10	0
	* Accepted.			† Withdrawn.								

* Accepted. † Withdrawn.

CORWEN (Wales).—For additions to the Union Work-house, for the Union Guardians. Messrs. J. Williams and Son, architects, Dee-view, Corwen:—

Jones, D. R. ...	£959	8	0
Owen, John, Cerrig-y-Druidion* ...	798	0	0
Davies, Wm. ...	780	0	0
Williams, John ...	750	0	0

* Accepted.

CROYDON.—For alterations to Nos. 53 and 55 Brighton-road. Mr. A. Broad, architect, 3, High-street, Croydon, Quantities by the architect:—

Saunders, E. J. ...	£645	0	0
Barker, D. W. ...	630	0	0
Hanscomb and Smith ...	559	0	0
Bullock, A. ...	549	0	0
Smith, W., and Son ...	519	0	0
Bulld, E. P., and Co. (accepted) ...	494	0	0

BISHOP'S STORTFORD.—For the construction of water-works (four contracts) for the Urban District Council. Mr. R. S. Scott, C.E., North Street, Bishop's Stortford. Quantities by Mr. John H. Blizard, A.M.Inst.C.E., 9, Victoria-street, Westminster, S.W.:—

Contract No. 1.—Reservoir, Cooling-pond, &c.		
Glasscock and Son	£2,598	0 0
Hipwell, S.	2,500	0 0
Vickers, J. H.	2,498	12 7
Catley, A. T.	2,488	0 0
Parmenter, S.	2,439	0 0
Cook, R., and Co., Phoenix wharf, Church-road, Battersea, S.W.*	2,380	0 0
* Accepted.		

Contract No. 2.—Well.		
Freeman, W. S.	£1,000	0 0
Hipwell, S.	875	0 0
Cook, R., and Co.	850	0 0
Vickers, J. H.	798	0 0
Tilley and Son	717	5 0
Batchelor, R. D.	697	11 9
Ingold, G.	658	13 0
Brown, W., and Sons, Tottenham*	625	16 0
(Accepted.)		

Contract No. 3.—Alterations and additions to engine house.		
Fuller, T.	£191	5 0
Hipwell, S.	185	0 0
Glasscock and Son	184	0 0
Chambers, H.	175	0 0
Vickers, J. H., Nottingham (accepted)	172	16 0

Contract No. 4.—Alterations to one Engine.		
Freeman, W. S.	£155	8 6
Robinson, A.	105	0 0
Northrop, J.	65	0 0
Lampitt, J., and Co., Banbury (accepted)	62	18 6

FARNBOROUGH, HANTS.—For the erection of a dwelling-house for Miss Sherwood. Mr. W. E. Travena, architect, Farnborough.

Finch, Frimley (accepted).
Lowest of five tenders.

HALIFAX. —Accepted for alterations and additions at Clapton-lodge, Halifax. Mr. Arthur G. Dalzell, architect and surveyor, Albany-chambers, Halifax:—		
Foster, Adam, Halifax, masonry	£153	5 0
Hanson, Joseph, Halifax, joinery	120	13 11
Holdsworth, John, Halifax, plumbing and heating	128	0 0
Bancroft, J., and Son, Halifax, slating and plastering	56	9 1
Berry, John, Halifax, ironfounding	33	0 0
Mainzer and Co., Ltd., London, parquet flooring	76	10 0

LLANDILO. —For the Llandilo intermediate school for the School Managers. Mr. David Jenkins, architect, Llandilo:—		
Williams, J., Swansea	£2,940	0 0
Davies, D., Cardiff	2,638	0 0
Meredith, A., Newbridge	2,550	0 0
Watkins, Thos., and Co., Swansea	2,511	0 0
Thomas, D., Cardiff	2,399	18 0
Rees, D., Ysllafra	2,383	0 0
Groom, E. G., Cardiff & Llandovery	2,350	0 0
Jones, T., Pugh, Llanelli	2,150	0 0
Davies, J., Swansea	1,963	0 0
Morgan, L., Talgarth	1,950	0 0
Jones, D. H., Llandilo	1,945	0 0
Evans, David, Llandilo*	1,840	0 0
* Accepted conditionally.		

LONDON. —For pointing and repairs to the City-road Work-house, for the Holborn Board of Guardians. Mr. Evan Vaughan, architect. Quantities by Mr. E. J. Sadgrove:—		
Wall, H., and Co.	£2,992	0 0
Dearing and Sons	2,975	0 0
Reason (accepted)	2,921	9 0

LONDON. —For pulling down old and erecting new work-shops, Fremont-street, Hackney, for the Misses Sheffield. Mr. T. Selby, architect:—		
Bradford	£945	0 0
Goodall	782	0 0
Kiddle and Son	747	0 0

LONDON. —For building new business premises at 173 and 175, High-street, Camden Town, for Mr. Flatau. Mr. Lewis Solomon, architect. Quantities by Messrs. Gritten and Son:—		
Reason	£2,760	0 0
Holloway	2,631	0 0
Downs	2,617	0 0
Coulson	2,593	0 0
Gould and Brand	2,582	0 0
Scott	2,575	0 0
Putman	2,500	0 0
Roberts	2,535	5 6
Anley	2,486	0 0

LONDON. —For painting and cleaning works to the infirmary, Cale-street, Chelsea, for the Guardians of St. Luke's, Chelsea. Messrs. Lansdell and Harrison, architects, 12, Compton-terrace, Highbury:—		
Norton, W.	£638	0 0
Lorden, W. H., and Son	444	0 0
Wade, Geo.	375	10 0
Eades, Wm., Chelsea (accepted)	320	0 0

LONDON. —For building new warehouse for Mr. Granger at Pentonville-road. Mr. H. H. Tasker, architect. Quantities by the architect:—		
Dove Bros.	£495	0 0
Stevens	486	0 0
Hayes	457	17 0
Hunt	455	17 0
Dearing and Sons	431	0 0
Reason (accepted)	420	0 0

LONDON. —For alterations, &c., to the "Limes," High-street, Mortlake, for the Urban District Council. Mr. G. Bruce Tones, surveyor, Beverley-road, Barnes:—		
Brooking, J. W.	£1,086	0 0
Wilcox, J. G. M.	1,070	5 0
Broderick, J. E.	975	0 0
Barber and Bellamy	834	0 0
Lorden, W. H., and Sons	825	0 0
Hunt, Alfred	785	0 0
Bloomer, John, High-street, Brentford (provisionally accepted)	676	0 0
[Surveyor's estimate, £700.]		

LONDON. —For making alterations to the "Town Hall Tavern," High-street, Kensington, for Mr. Samuel Raven. Mr. R. Dickinson, architect, 5, John-street, Adelphi, W.C.:—		
Scharien and Co.	£1,693	0 0
Kearley and Co.	1,378	0 0
Dearing and Son	1,362	0 0
Turtle and Appleton	1,260	0 0
Beer and Gash	1,260	0 0
Norton	1,240	0 0
Edwards and Medway	1,219	0 0

LONDON. —Accepted for the erection of the superstructure of the buildings on plot A of the Boundary-street area, for the London County Council:—		
Holloway Bros.	£9,180	0 0

LLANELLY (WALES). —For the erection of a schoolroom and vestry, for Caersalem Baptist Chapel, Llanelli. Mr. T. Arnold, C.E., architect, Llanelli:—		
Davies Bros.	£515	0 0
Clement, William*	495	13 0
Brown, Thomas & John	493	0 0
Hopkins, Wm., & Son†	485	0 0
Roblin, David...†	227	10 6

(All of Llanelli.)
* Accepted. † Carpentry and Joinery.
‡ Masonry and Plastering only.

MELKSHAM. —For the erection of four semi-detached villas, for the Melksham Dwellings Co., Ltd. From plans and specifications supplied by Mr. E. Gunstone, surveyor, Melksham:—		
Davis and Sons	£1,125	0 0
Linzy	1,080	0 0
Bigwood and Co. (accepted)	1,063	10 0

MACCLESFIELD. —For additions to school buildings, Langley, for the Sutton School Board. Mr. John Clayton, architect, Sunderland-street, Macclesfield:—		
Bradburn, J., and Sons...	£356	0 0
Roylance, G., and Co., Ltd.	320	0 0
Gorton and Wilson	287	0 0
Frith, E., and A., Catherine-street, Macclesfield (accepted)	255	0 0

PLYMOUTH.—For erection of dwellings for the working classes, to accommodate 488 persons, at Prince Rock, for the Plymouth Borough Council. Messrs. Hine & Odgers, architects:—

Goad, W. G.	£19,815	0 0
Berry, J. P.	18,990	0 0
Julian, J., Truro	18,586	0 0
Finch, J.	17,630	0 0
Matcham and Co., Ltd.	17,104	0 0
Shellabear, G.	15,900	0 0
Tozer and Son	15,876	0 0
Blowey, P.	15,800	0 0
Wakeham Bros.	15,615	8 9
Trevena, W.	15,555	0 0
Lethbridge, A. R., and Son	15,445	0 0
Andrews, A.	15,294	0 0
May, T. (accepted)	14,955	0 0
[Rest of Plymouth.]		

PAIGNTON. —For erecting boundary wall and gate piers at the Public Park, for the Paignton Urban District Council. Mr. J. Stansfield-Brun, Town Surveyor. Quantities by Mr. Vincent Cattermole Brown, of Paignton:—		
Webber, G.	£195	0 0
Harris, R.	184	10 0
Bridgman, M. (accepted)	179	19 4
[Surveyor's estimate, £184.]		

PAIGNTON. —For the erection of new Wesleyan church, Palace-avenue, Paignton. Messrs. W. G. Couldrey and G. S. Bridgman, joint architects, Paignton. Quantities by Mr. V. C. Brown, Paignton:—		
Webber and Maunder, Hyde-road, Paignton	2,270	15 0
Webber, H., and Sons, Willow Dale, Paignton	2,229	10 0
Drew, C. and R. E., Town Hall-terrace, Paignton	2,180	0 0
Rabbich, H. P., Victoria House, Paignton	2,126	0 0
Yeo, R. F., Rock-road, Torquay	2,014	0 0
Bridgman, M., Garfield-terrace, Paignton	2,011	14 6
Bovey, E. P., Torwood-street, Torquay	1,995	0 0
Blatchford, S., Upton, Torquay*	1,991	12 0
Lamacraft, J. H., 4, Park-road, Dawlish (declined through error)	£1,893	10 0
* Accepted.		

SALISBURY.—For pulling down and re-building the business premises known as New Sarum-house, Market-place, Salisbury, for Messrs. Main and Sons. Mr. Fred Bath, F.R.I.B.A., F.S.I., architect, Crown-chambers, Salisbury. Quantities by the architect:—

	The whole of Work.	Deductions.	Amended Tender.
Belham and Co., London	£6,978	3 7	£1,464 15 3
Webb and Co., Salisbury	6,156	13 0	902 19 3
Kellow & Smith, Salisbury	5,950	0 0	480 10 0
Wilkins, G. H., Bristol	5,840	0 0	662 0 0
Vincent and Folland, Salisbury	5,550	0 0	483 12 0
Jenkins & Sons, Bournemouth*	5,526	0 0	1,128 0 0
* Accepted, subject to a slight modification.			

RETFORD. —For the erection of public baths and caretaker's house, for the Town Council:—		
Wilson, J. (accepted)	£2,120	0 0
For engineer's work in connection with the baths:—		
Moorwood, Sons and Co., Sheffield*	£303	0 0
* Accepted.		

WALSALL.—For the erection of public baths in Lichfield-street, for the Town Council. Messrs. Bailey and McConnel, architects, Walsall:—

Hughes, R. M. (accepted)	£6,971	0 0
--------------------------	--------	-----

WORTHING.—For construction of engine-house and other buildings, reservoir, &c. in connection with waterworks. Mr. Mansergh, Engineer:—

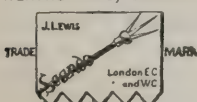
Wilkinson (accepted)	£1,490	2 11
----------------------	--------	------

BRICKS 2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

JOHN BENNETT, 32, Guilford Street, London, W.C.
GRANITE, MARBLE, MOSAIC & TILE WORK OF EVERY DESCRIPTION.
ESTIMATES AND DESIGNS FREE.
WORKS: 1, 19 & 20, BRUNSWICK MEWS, W.C.

TELEGRAMS—
"WEATHERVANE, LONDON."



J. LEWIS, 5 & 6, Great Winchester Street, LONDON, E.C.
LIGHTNING CONDUCTORS.

ELECTRICAL EXHIBITION CRYSTAL PALACE AWARD, 1892.

"LEWIS LINK," the only EFFICIENT COUPLING for Conductors. PATENT No. 16,641

SEE SECTION FIG. 2.

VILLAS, MANSIONS, SCHOOLS, CHURCHES, FACTORIES, CHIMNEY SHAFTS, &c.



GARTER & CO.
TILES MOSAIC FAIENCE
Poole Dorset

ROBT. ADAMS, 67, Newington Causeway, London, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self Compensating

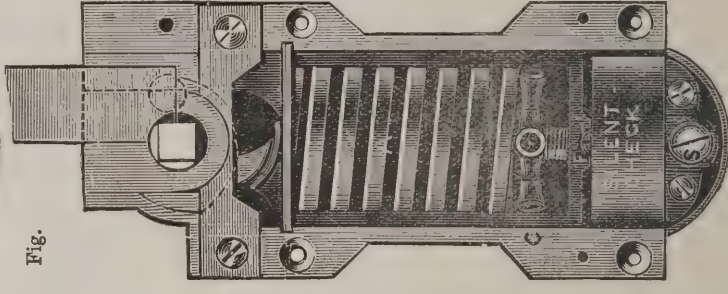
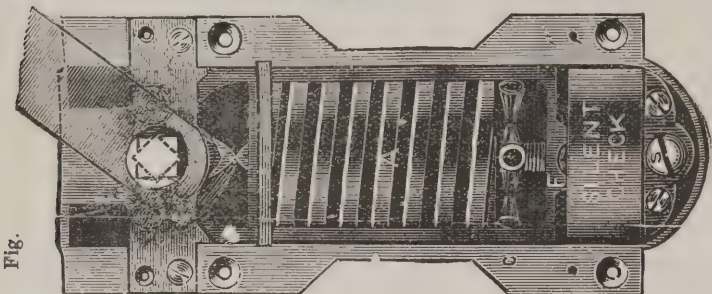
SPRING HINGES

Guaranteed to last
longer and work better
than any hitherto
made.
CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to and
closes from the angle
of 135°

Fig. 3 is the new
Single Action Spring.
It opens to and closes
from the angle of 180°
i.e., "wide back."

THE FIRST
SPRINGS EVER
PRODUCED WITH
THESE GREAT
ADVANTAGES.



WALNUT TREE BRIDGE (WALES).—For building six villas
for the Garth Building Club. Messrs. Griffiths and Jones,
architects, Pontypridd and Tonypandy:—

Jones, D. C., and Co.	£2,494	0	0
Jenkins, Jno.	2,375	0	0
Williams and James	2,334	0	0
Richards, A.	2,287	0	0
Colborn, A. J., Caerphilly*	2,179	0	0
Julian, M.	1,744	0	0

* Amended and accepted.

COMPETITIONS.

LUDLOW GRAMMAR SCHOOL. TO ARCHITECTS AND OTHERS.

The Governing Body contemplate providing SCHOOL
BUILDINGS and PREMISES, including Head-master's
house, Offices, and Play-ground, suitable for thirty
boarders and ninety day scholars, at a cost of not exceed-
ing £4,500, and planned with a view to convenient exten-
sion on part of the Cricket Field, situate on the Bromfield
Road, Ludlow.

The Governors offer two prizes of £25 and £10 for
PLANS, which, in their opinion, are the best and most
suitable, and which will meet with the approval of the
Charity Commissioners.

In the event of the winner of either prize being retained
as Architect, such prize will be merged in his commis-
sion.

Plans to be enclosed in sealed envelopes, endorsed
"School Plans," and to be delivered at our offices not
later than FRIDAY, 2nd day of AUGUST next.

ANDERSON, SON & TYRRELL,
Clerks to Governors.

55, Mill Street, Ludlow,
2nd July, 1895.

ROYAL LONDON OPHTHAMIC HOSPITAL.

The Committee of Management are prepared to
RECEIVE and CONSIDER APPLICATIONS from
firms of engineers desirous of submitting SCHEMES
and ESTIMATES for the VENTILATION, WARM-
ING, and SUPPLY of HOT WATER for domestic
purposes, or either of them, for the new Hospital about
to be erected in the City-road.

Persons desirous of Tendering should send in written
applications addressed to the Secretary, on or before
the 22nd JULY next, and each application must be
accompanied by full particulars of works of a similar
nature carried out, with testimonials.

R. J. NEWSTEAD, Secretary.

CONTRACTS OPEN.

TOTTENHAM URBAN DISTRICT COUNCIL.

TO CONTRACTORS.

The Council invite TENDERS for the CONSTRUCTION
OF CONCRETE CULVERTS and Other Works
in connection therewith, in the 3rd section of the Stone-
bridge Brook, between Napier-terrace, St. Ann's, and
Effingham-road, Green Lanes.

The plan can be seen, and specification, quantities,
schedule of prices, and forms of tender obtained, on
application to Mr. P. E. Murphy, Engineer to the
Council, at their Offices, Coombes Croft House, 712,
High-road, Tottenham, any day during office hours.

Sealed tenders, on the form supplied, endorsed
"Tender for Concrete Culverts, &c., 3rd Section,
Stonebridge Brook," to be delivered to me by Twelve
o'clock noon on TUESDAY, 23rd July, 1895.

The sum of Ten Shillings will be charged for the
quantities, which will be returned on receipt of a
bona fide tender, accompanied by the specification,
quantities, and schedule of prices, otherwise the deposit
will be forfeited.

No other form of tender will be received.

Security will be required for the due performance of
the contract.

The Council will not be bound to accept the lowest or
any tender.

By order,
EDWARD CROWNE,
Clerk of the Council.

Tottenham, July 12th, 1895.

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48. HAMMERSMITH ROAD. W.

Quantities, &c., Electrographed

Equal to Lithography and 50 per cent. CHEAPER. Prices and
specimens on application. Lithography at moderate rates.

OLDACRES & CO.,

59 & 60, CHANCERY LANE, LONDON, W.C.

N.B.—No connection with any other firm.

Telegrams, "OLDACRES, LONDON."

SWANAGE SCHOOL BOARD.

TO BUILDERS.

The School Board for Swanage are prepared to receive
TENDERS for the ERECTION of NEW SCHOOLS in
Townsland-lane.

The plans and specification may be seen at the Town Hall,
Swanage, between the hours of TEN and FOUR, from
July 10th to 24th, inclusive.

Tenders are to be delivered not later than TWELVE
o'clock noon on the 25th instant, and will only be received on
forms obtainable from me.

The Board do not bind themselves to accept the lowest or
any Tender.

S. J. S. TATCHELL,
Clerk to the Board.

WILLESDEN SCHOOL BOARD.

TO BUILDERS.

The Board will shortly be ERECTING two SCHOOLS,
each to accommodate 1,250 children, and invite builders
desiring to be placed on a selected list for TENDERS, to
apply on or before the 20th JULY, and state particulars of
recent large works carried out by them.

W. VINCENT,
Clerk to the Board.

Public Offices, Dyne-road, Kilburn, N.W.
July 6th, 1895.

TO BUILDERS.

TENDERS are required for the ERECTION of
SCHOOL BUILDINGS for deaf, dumb and blind, at the
Mount, Penkhull, Stoke-upon-Trent, Staffordshire.

Plans may be seen and quantities obtained at the Offices of
the architects, R. Scrivener and Sons, Howard-place, Hanley,
on and after Tuesday, the 16th inst.

Tenders, properly endorsed, to be sent to me on or before
TEN a.m. on THURSDAY, the 25th inst.

Neither the lowest nor any Tender necessarily accepted.

W. T. COPELAND, Clerk.

School Board Offices, Stoke-on-Trent.

TOTTENHAM URBAN DISTRICT COUNCIL.

TO CONTRACTORS.

The Council invite TENDERS for CURBING and
ROADMAKING, &c., in White Hart-lane, Tottenham.

The plan and specification can be seen, and quantities,
schedule of prices, and forms of tender, obtained on ap-
plication to Mr. P. E. Murphy, Engineer to the Council,
at their Offices, Coombes Croft House, 712, High-road,
Tottenham, any day during office hours.

Sealed tenders, on the form supplied, endorsed "Ten-
der for Curbing, &c., White Hart-lane," to be delivered
to me by Twelve o'clock noon on TUESDAY, the 23rd
July, 1895.

The sum of 20s. 6d. will be charged as a deposit for the
quantities, which amount will be returned on receipt of
a bona fide tender accompanied by the quantities and
schedule of prices; otherwise the deposit will be for-
feited.

No other form of tender will be received.

Security will be required for the due performance of
the contract.

The Council will not be bound to accept the lowest or
any tender.

By Order,
EDWARD CROWNE,
Clerk of the Council.

Tottenham, July 12th, 1895.

GUILDFORD CORPORATION.

NEW CATTLE MARKET.

TO BUILDERS, CONTRACTORS, and OTHERS.

The Corporation are desirous of receiving TENDERS for
the LAYING OUT and CONSTRUCTION of a NEW
CATTLE MARKET in the Woodbridge-road within the
Borough.

The work will be divided into two sections, Contract No. 1
comprising the Builder's Work, &c., and Contract No. 2 the
Iron Work.

Plans and specifications may be seen on application to Mr.
F. T. MALTBY, C.E., the Borough Surveyor, at his Offices,
Tunsgate, Guildford, from whom bills of quantities and form
of Tender may be obtained on payment of 41 is. which will
be returned on receipt of a bona fide Tender.

Tenders, endorsed "Tender for Cattle Market Contract
No. —," must be sent to me on or before MONDAY, the 5th
day of AUGUST, 1895.

The Corporation do not bind themselves to accept the
lowest or any Tender.

FERDINAND SMALLPEICE,

Town Clerk's Office, Guildford.
July 8th, 1895.

TO ENGINEERS and OTHERS.

The Guardians of Kensington are desirous of re-
ceiving TENDERS for SUPPLYING and FIXING an
ADDITIONAL BOILER and making other Alterations
and Additions to the Boiler Power of the Laundry, at
their Workhouse in the Marloes-road.

The plan and specification may be inspected at the
Office of Mr. T. W. Aldwinckle, the Architect, 1, Victoria-
street, Westminster, and Tenders, on a form to be
obtained from him, must be delivered at the Guardians'
Offices, by or before Two o'clock on THURSDAY, the
25th July inst.

The Guardians do not bind themselves to accept the
lowest or any Tender.

By Order,

JNO. H. RUTHERGLEN,
Clerk to the Guardians
Guardians' Offices,
Marloes-road, Kensington, W.,
July 10th, 1895.

GREAT WESTERN RAILWAY.

The Directors of this Company are prepared to receive
TENDERS for ALTERATIONS and ADDITIONS to
the Passenger Station at Bath.

Plans and specification may be seen and forms of Tender
and bills of quantities obtained at the office of the Engineer
at this Station, between the hours of TEN a.m. and
FOUR p.m.

Tenders addressed to the undersigned, and marked outside
"Tender for Works at Bath," will be received on or before
TUESDAY, the 23rd instant.

The Directors do not bind themselves to accept the lowest
or any Tender.

G. K. MILLS,
Secretary.

Paddington Station, London.
July 3rd, 1895.

TO ENGINEERS and IRONFOUNDERS.

CONTRACT No. 3.

The Ramsbottom Urban District Council are prepared to
receive TENDERS for CAST IRON FLANGE PIPES
and VALVES, &c., required at the sewerage works at Sum-
merseat. On and after the 23rd July drawings and specifica-
tions may be seen, and bills of quantities obtained on
application to Mr. THOS. NUTTALL, C.E., 12, Market-
street, Bury, on payment of 20s., which will be returned on
receipt of a bona fide tender and the documents. Tenders,
endorsed "Contract No. 3," must be delivered at the Offices
of the Council on or before the 30th JULY.

The Council do not bind themselves to accept the lowest or
any tender.

JOHN W. BARLOW, Clerk.

Council Offices Ramsbottom.
July 11th, 1895.

SPHINCTER WORKS,

EMERSON STREET, LONDON, S.E.,

MANUFACTURERS OF

LECLANCHE BATTERIES, TELEPHONES,
ELECTRICAL THERMOGRAPHS,
WATER TELEGRAPHS, and COMPLEX
COMMUNICATIONS of all kinds

The Builders' Journal.

Vol. I., No. 24.

Tues., July 23, 1895.

ILLUSTRATIONS.

Roman Thermæ of Fiesole: View of the Natatium
looking through the Frigidarium 369
Detail of a Terra Cotta Front:
By Romaine-Walker & Tanner 371
A Design for Font and Cover, Twelfth Century 373
North Walsham Church, the Sedilia:
Measured and Drawn by R. B. Martin 373

"In Memoriam":
Designed by H. P. Burke Downing 375
St. Martin's Church, Lewes Road, Brighton:
Somers Clarke, Jun., Architect 377
St. Mary's Church, Stretton, near Burton-on-Trent:
Somers Clarke & Michlethwaite, Architects 378
St. Mary's Church, Stretton, near Burton-on-Trent:
Plan by Messrs. Somers Clarke & Michlethwaite 379

CONTENTS.

The Antiquity of the Yorkshireman 369
Wood Pavement..... 369
A Suburban Villa 370
An Old Glasgow Architect on Some Older
Ones: By Thomas Gildard 370
Bricks and Mortar..... 372
"The Destruction of Edinburgh" 376
The A. A. Visit to Blythwood and Stanstead 376
Completion of the Albert Memorial, Exeter 376

Men who Build, No. 22.—Mr. Somers Clarke 376
The Colour of Irish Marbles 377
A Yorkshire Elizabethan House: The
Design attributed to Inigo Jones 378
In North France: Laon and Its Cathedral 379
The Art of Illustrating in Black and White 380
The Arrangement of Shrines 380
The Early "Scottish Manner" in Church
Building 381

The Weakness of Norman Towers: Dan-
gerous Condition of Shoreham's Famous
Church..... 381
Professional Items..... 382
Society Meetings 383
Our Bookshelf 383
The "Builders' Journal" Competition.... 384
Trade and Commerce 384

The Antiquity of the Yorkshireman.

In the Ridings of North and East Yorkshire, the members of the Royal Archaeological Institute spent a delightful summer session last week. The East Riding is peculiarly rich in ecclesiastic work, while the North Riding proudly wears Whitby Abbey on the crest of that famous hill—beneath which nestles the "haven" of the old town—as signet of much inland treasure. Yorkshire is essentially a student's county, be the student either architect or archaeologist, antiquarian or historian. Professor Boyd Dawkins hit the mark when, in the course of his address on Wednesday evening to the members of the Antiquarian Section, he observed that the study

of antiquities, so long a mere dilettante study, had now become an exact Science, and employed the same method of rigid induction as any of her sister subjects. The Professor, full of one of his favourite themes, in considering the question of the antiquity of man in Yorkshire, spoke of the hippopotamus wandering as far north as Kirkdale or Leeds. We do not wish to be guilty of levity, or we might be tempted to ask the hippopotamus a personal question. We must conclude, however, that nothing but his tusks remain to fertilize what soil Leeds will still permit he surrounds to possess. Man, said the Professor, found his way to Britain when our land formed part of the Continent, and the mammoths of the Palæolithic came by the aid of their own solid stride. The relation of Palæolithic man to the glacial phase of the Pleistocene period was clearly shown by the distribution of his implements in Yorkshire and in the South of England. They had been discovered in abundance in the caves of Cresswell Crags, on the southern borders of the county, and are met with in both caves and river deposits south of a line connecting the Bristol Channel with Peterborough. Why were they absent from the post-glacial river deposits to the north-west of that line? The advance of the Palæolithic hunter over Yorkshire was barred either by the masses of ice which had left their traces in the ice-

worn hills of this district, or by the waters of the sea which covered northern and middle Britain during a submergence of not less than 1,200 feet. The Palæolithic implements in the caves in the district, covered more or less by the glacial drift, showed that man was living in Yorkshire in pre-glacial times, while the absence of the implements in the post-glacial strata could only be explained by the existence of one or the other of these barriers. It could not be said that any great addition to our knowledge of Palæolithic man had been made during the last 20 years. If the Palæolithic and Neolithic inhabitants of these islands were separated by the great climatic and geographical changes slowly



ROMAN THERMÆ OF FIESOLE: VIEW OF THE NATATIUM, LOOKING THROUGH ARCHES TOWARDS THE FRIGIDARIUM.

brought about in untold ages, still more were they separated by their habits, manners, mode of life, and general archaeological condition. The Palæolithic men were nomad hunters, ignorant of all Arts except sawing, implement making, and the use of fire. It was strange that in the midst of this savage life one section of the cave-men should have left figures of the animals on which they lived, scratched on bone, antler, and stone, with remarkable spirit—as, for example, in the caves at Cresswell—handles carved in the shape of animals, such as kneeling reindeer and standing mammoths, in the caves of France. The Arts of Drawing and Sculpture were developed to a high degree.

The Neolithic men were not only hunters, but farmers and herdsmen, growing wheat and flax, and keeping herds of short-horned oxen and swine, and flocks of sheep and goats, and a breed of large dogs. To them we owed the domestic horse, so dear to all true natives of Yorkshire. They were spinners and weavers, and miners of flint for the manufacture of implements which they turned to use in the clearing away of the forest, and the development of carpentry. They lived in fixed habitations, generally circular tents, half sunk in the ground. In spite, however, of this immeasurably higher culture, they were singularly devoid of the art of reproducing natural forms, which

their Palæolithic predecessors carried to so high a pitch in England, France, and Switzerland. Turning to the Bronze age in Europe, Professor Dawkins said that the many skeletons which had been met with in almost every part of the British Isles proved that the use of bronze was introduced by the tall, broad-headed Goidelic ancestors of the Irish Celts, and the Gael of Scotland. Cremation was first practised in Great Britain in the age of Bronze. On the subject of pre-historic Archaeology in the district of Scarborough, he remarked that the Neolithic remains belonged to the long-headed Iberic race of men—the oldest living stock in Europe—to whom the small, dark Yorkshire men and women of to-day owed not only their dark hair and eyes, and long

heads, but the taste for horse-flesh which, as every one knew, was one of the attributes of the dwellers of the county. Professor Dawkins generally contrives to make the Remote Ages interesting, but he never did mankind a greater service than when he settled for us—last week—the antiquity and genesis of the Yorkshireman. It is a subject upon which some bones have been broken—bones not altogether the property of the Palæolithic Age!

Wood Pavement.

DR. BLYTH, the Medical Officer of Health for the parish of St. Marylebone, set an admirable example to other London districts by

the periodical publication of his "Sanitary Chronicles." These contain a mass of information and comment upon all matters connected with the health and vital statistics of the parish. The most interesting part of last week's issue is a report by Dr. Blyth upon wood pavement considered in relation to public health. Dr. Blyth points out that the slightest fall of the barometer results in the abstraction from the earth of a large amount of the air in it, and that therefore a large proportion of the air supplied to a house that is not built on an impervious foundation, such as concrete, is often necessarily impure. Asphalte and wood paving find the gases emanating from the soil, and these are delivered into the basements of houses, as if through pipes, unless the foundations are impervious. Dr. Blyth further desired to know whether the emanations from wood pavement in hot weather came from the surface, or whether the blocks are saturated throughout. He therefore procured two blocks, which had been six years in the pavement of Oxford Street, one from the centre of the road, and one from the channel. He cut slices from the top, middle, and bottom of each of these, and carefully analysed their contents. The centre block showed most ammonia in the top layer, whilst the channel block was saturated at the bottom by a layer of foul water flowing beneath, and gravitating to the lowest point. At the rate shown by his specimens, 1,000 square yards of wood pavement would yield over a pound and a quarter of solid ammonia. But Dr. Blyth does not feel justified in declaring that wood pavement is responsible for any of the diseases—such as ophthalmia and sore-throat—which it is often said to produce. For purposes of health he is of opinion that asphalte pavement is much the best. At present it is justly disliked because of the ceaseless sharp rattle made by horses' feet, and because it is so dreadfully slippery in wet weather. Dr. Blyth believes in the coming advent of compressed air for street locomotion. Wood pavement, moreover, is four times the cost of granite pavement averaged at per yearly cost on the life calculation of fifteen years for wood and thirty for granite.

A Suburban Villa.

A case, before Sir Forrest Fulton, illustrates once again how necessary it is for an Architect to be in a position to protect himself from the astuteness or jerry mandering of his clients. There is nothing quite so effectual as being able to take your wrongs into Court. Mr. H. G. Grierson had no doubt in his own mind, nor, for the matter of that, had the Jury. A Mr. Edgington, whose licensed victualling career had enabled him to retire early, bethought him that a house at Croydon might add to the enjoyment of life. Croydon suggested the suburban Villa. But there is more than one way—we assert it boldly and fearlessly—in which to build a suburban Villa, though we are aware that the evidence is a little against us on the point. However, Mr. Edgington, being anxious to have all in proper form, called in Mr. Grierson, Architect and Surveyor, and spoke generally and specifically of plans and specifications. Mr. Grierson set to work and produced one set of plans; the client did not like them, we presume, for presently there was a second set of plans in the field. No. 1 went under and No. 2 was adopted. So the house is now being built—at Croydon—to cost £500. We note Mr. Grierson's modest charges—£15 each set—too modest, in our opinion, for we strongly hold that the Institute Scale should be lived up to and maintained in proper dignity. Defendant—who was of a retiring disposition—had paid £10. We are glad Mr. Grierson won his case—full amount.

AN OLD GLASGOW ARCHITECT ON SOME OLDER ONES.

By THOMAS GILDARD,

HONORARY MEMBER OF THE GLASGOW ARCHITECTURAL ASSOCIATION.

IN December, 1838, I was apprenticed for five years with Messrs. David and James Hamilton, whose office was at the head of Buchanan Street, on the site now occupied by the George Hotel. Mr. Hamilton was in about his seventieth year, and was a man of most impressive presence, frank and kindly in manner, with a bearing of ease and dignity. He was, to use a common expression, somewhat "aristocratic" in appearance, and in social intercourse was distinguished by much grace and courtesy. James, his son, had not much more than attained his majority. He was tall and remarkably handsome; his fine features somewhat of an Italian cast, and his long glossy black hair rolling in ringlets. When I entered the office the late Mr. Rothead had been in it six months, a draughtsman, and the late Mr. Baird, a year or two.

As the house and office were together, the "lads," as we were called, were almost every morning favoured by a visit from Mrs. Hamilton, who took a seat, and had a kindly chat with us for half-an-hour or so. It seemed almost as if we were living "in family," and, although it is a long time since, there remains with me a pleasant impression of the homely, hearty kindness I experienced from all the Hamiltons under the old-fashioned arrangement of house and office together.

Mr. Hamilton had formed an excellent library, of not only great books on Architecture, but of books illustrative of Painting and Sculpture. He had also many choice line engravings, and other things that might be expected in the house of a family all of inborn, and some of highly-cultivated taste. Mr. Hamilton was the recognised head of the Profession, his position was unique, and, as his fame had gone beyond Glasgow, he had, I might almost say, frequent visits from men of eminence in the Arts, bearing letters of introduction. I remember seeing Kemp, the Architect of the Scott Monument, and Mr. Hamilton taking him down stairs to see the office, and, I have no doubt, that we also might see him.

Mr. Hamilton was architect of the Royal Exchange and Hamilton Palace. In both of those buildings, as in several others, he was fettered by the condition of retaining a portion of an existing building. In the Exchange the old Stirling Mansion (afterwards banking office) is veneered within and without, and what is retained of the old Palace is what was its front elevation, now doing service as its back. It seems strange that the Glasgow of little more than sixty years ago, the Glasgow that had the spirit and discernment to erect such a magnificent building as the Exchange, should have been so "penny wise and pound foolish" as to incorporate with it any of the petrified skeleton of a former structure. In both buildings the difficulty has been most successfully overcome—in the Exchange by the adaptation of the old walls, and in the Palace by the reconciliation of the new Front with the old; indeed, the taking down of the fine façade, now the back of Hamilton Palace, would be a thing to be regretted. Of course the Exchange was finished before my time, but the work of the Palace was still being carried on, both Mr. Rothead and Mr. Baird having occasionally some detail of it upon their boards. These buildings, from their magnitude and importance, would otherwise confer a reputation upon any Architect, but in their quality they may be taken as specimens of Hamilton at his best.

The Portico of the Exchange is grandly proportioned and admirably detailed, and where there is a variation from the example it is made with great judgment. The scale of the order upon the sides is different from that on the front, and I have heard it said, by those much more able to judge than myself, that the junction of the two is effected with much art. The fine proportions of the Reading Room have been often the subject of praise, and the area-railing and the lamp-irons are seemingly among the first attempts in Glasgow to give an Art character to such accessories. I may mention that in the "after-measurement" of the

Exchange "the line" was "held" by our venerable Treasurer, Mr. Howatt. The Portico of the Palace is of the same high quality as is that of the Exchange, and the detail of the building throughout is bold and vigorous. Some of the graces of his Art may have eluded him, but, at least, when in his zenith and in his later years, Mr. Hamilton's work was largely characterised by that easy power which "gave the World assurance of a man." Whatever other fault it may possess—the detail may sometimes lack purity, and sometimes refinement—it has never feebleness.

"Void of weak fever and self-conscious cry,
Truth, bold and pure in its own nakedness"—

it is singularly free from all meretricious artifice; defects are not sought to be diverted from or disguised by cunning of mere handicraft or costliness of material, nor is regard importuned by any undue obtrusion of special parts or "features." The Architecture is as honest as is the masonry—stone being treated as stone, and not as wood or plaster.

While I was in the office, besides Hamilton Palace, there were being designed and executed Lennox Castle, the Western Club House, and the British Linen Company, the Union, the Clydesdale, and the Western Banking Offices, and such smaller works as Hutcheson's Hospital School, a Church at Ascog, Saint Fillan's Villa, near Largs, the Lodge at the Fir Park Necropolis, the completion of the Normal Seminary, and additions to Stonebyres and Camis-Eskan Mansions.

Lennox Castle is in the Norman style. In its composition are united breadth and picturesqueness, and, as it stands on a considerable height, these are seen to advantage. Mr. Hamilton, no doubt, knowing how to compose the building with the landscape. The plan is excellent, both for convenience and vistas; indeed, the "Architectural Publication Society's Dictionary" considers it as one of Hamilton's best.

I do not know if Mr. James participated in the designing of Lennox Castle, but he was considerably exercised as joint Architect of all the other buildings I have mentioned, excepting of course, Hamilton Palace and the Royal Exchange, which were too early for him to have had any share in.

The site of St. Fillan's Villa is a knoll commanding two views of the Firth of Clyde, and to embrace these, recourse was had to a peculiar plan, something like the letter A in outline, the Entrance being in the lower side of the bridge, and the Entrance Hall resolving itself into a triangle, with large semi-circle on each side. The Lodge of the Necropolis is of the same style as is Lennox Castle, and the detail is very similar.

The addition to Stonebyres House is very good in its way, but it is scarcely of the same period as the original building. The old house is Scottish, and the addition is Jacobean; but in Mr. Hamilton's time Architects were not so familiar with the niceties of some of the Mediæval styles as they are now.

The little Church at Ascog is beautifully situated on a promontory, and, as "the right thing in the right place," forms one of the most interesting objects in a singularly interesting landscape. It is exceedingly simple in design, seemingly modelled on some sort of the rural Architecture of Italy. I think it is to be regretted that the roof is not covered with red tiles instead of harsh blue slates.

I am not familiar with the addition to Camis-Eskan House, but, as far as I remember, it was something plain, as if it had been part of the original. In the addition Mr. Hamilton had, at least, the satisfaction of exercising his judgment, perhaps not so brilliant a faculty as is the imagination, but always entitled to, yea, demanding recognition.

After Mr. Hamilton's death, the Western Bank was considerably altered by Bryce, of Edinburgh, and since the Company's bankruptcy it has been altered again, some vestiges, however, remaining that show the genius of each Architect, and tell that once it was a public building. The Clydesdale Bank is on a minor key, and looks plain, perhaps even commonplace, compared with that which we see in the elevations of more recent banking offices. Several years ago the Clydesdale Bank re-

moved to a palatial building in Saint Vincent Place, designed by Mr. Burnet.

Although not without blemishes in composition and detail, such as two windows instead of three in the upper storeys of the Wings, and some questionable foliated ornament—which, indeed, was Rothead's—the Western Club House enjoys a greater dignity than do most buildings in Glasgow, and this not because of its size—generally an impressive element—but of its breadth of treatment, repose, and that quiet unconscious power which is always favoured by the unspectacled critic. There is nothing petty about it. All is large and liberal, broad and massive, an outcome of a mind that had no room for littleness—playing with “bits,” and toying with stones bedded in mortar as if they were gems set in gold. “And, to add greater honours to his age,” this, although one of Hamilton's latest works—carried on, indeed, while in his last illness—is wholly different in style from any of those in which he chiefly achieved his fame. In the Western Club House, and a contemporary work, the British Linen Banking Company's Office, there is a remarkably ready apprehension of the change that was coming over the spirit of Architecture, the new and freer manner that has been ascribed to a succeeding generation.

In thirty years' time the Club House became too small, and an addition was built from designs by Mr. Honeyman. This addition is a continuation along Saint Vincent Street, and much improves the proportion of this elevation, for, although the building is throughout characterised by greatness of manner, in the frontage towards Saint Vincent Street the windows are so tall and comparatively so close together, that the facade has perhaps as much of the vertical as the horizontal in its composition. Mr. Honeyman has judiciously carried along the lines of the original building, his principal innovation upon the genius of his example being a bay or oriel window upon the second floor. This gives interest to the elevation, and although placed at an irregular interval, like to a discord in music, in no wise disturbs the general harmony of the design. But it is possible to “manage with disjointed skill the matter well the manner ill,” and a bay-window resting upon a balcony (a parallelogram in plan, and extending lengthwise beyond it), the balcony carried by consoles over a three-light window, seems to be a somewhat illegitimate construction, both æsthetically and mechanically. For the three-light window, the consoles, and the balcony, there is warrant from the Buchanan Street elevation, but when consoles have “a double debt to pay”—to carry besides a balcony a bay-window—they should

surely be of a more powerful outline, and a larger treatment. Mr. Honeyman has thought fit to vary them, and having varied them at all, might have varied them more, and made them greater for their greater purpose. The endeavour apparently has been to continue the genius of the design, by carrying into the addition in Saint Vincent Street a prominent feature from the Buchanan Street elevation, and to compose with this a wholly new if not foreign element, and by this composition to subserve two purposes—to vary, by something distinctive, the fenestration on two floors, which would other-

or from his manner being so very different from that of the time in which Mr. Honeyman was engaged upon it, but from the consideration that to do no more than continue the original design would be to render the whole facade commonplace, and that to do more might be to disturb the whole composition. Mr. Honeyman has done more without disturbing, and, in that “more,” has added a new interest.*

The principle elevation of the Union Bank as designed by Mr. Hamilton, was taken down some years ago, and another elevation

has been put in its place by Mr. Burnet. The chief feature of Mr. Hamilton's design was a Roman-Doric frontispiece of six columns with pedestals, and balusters between them, forming a screen-wall. The frontispiece had a depth of about 10 ft. in which access was had by the screen-wall between the extreme columns of each end being left open. This frontispiece is now part of the Royal Princess's Theatre, but the diameter of the columns being reduced to three-quarters, and they being veneered upon the walling, the effect, of course, is very different from what it was when they were entire, with a shadow-depth of ten feet behind them. Besides the alteration on the front towards Ingram Street by Mr. Burnet, there was the taking down of the Telling Room, which was towards Virginia Street, and the substitution of another from a plan by Mr. Salmon. The original Telling Room had access from Virginia Street by a Roman-Doric Colonnade of four columns. Between Mr. Burnet's Façade and Mr. Salmon's Telling Room, there is now comparatively little representative of David Hamilton.

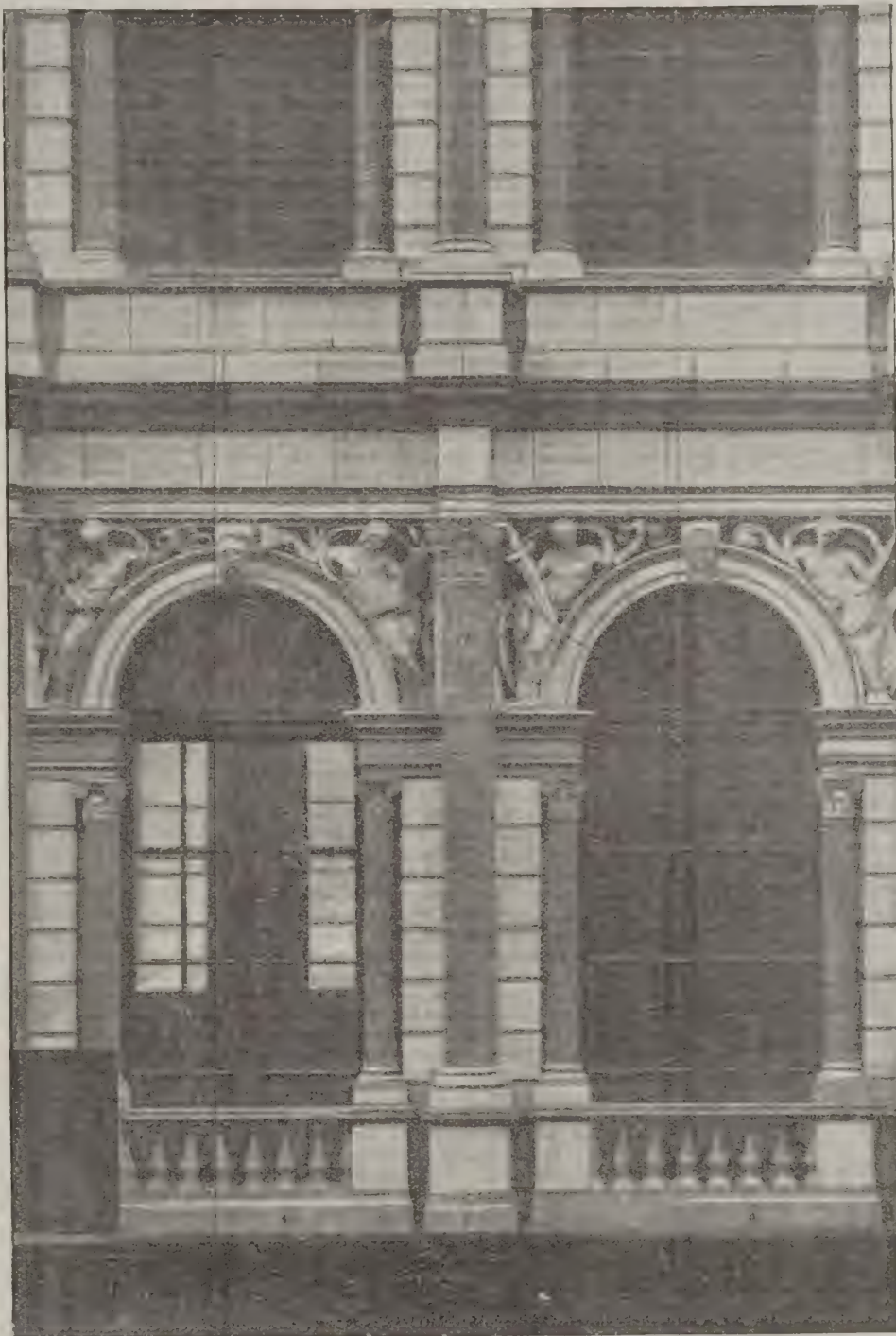
While speaking of the Western Club House, I incidentally mentioned the British Linen Company's Bank. There was in one of the sketch-drawings an idea to finish the circular corner with a Dome, but this intention was departed from, in deference, I believe, to the dignity of the Exchange. I remember Mr. Hamilton showing his sketch-design to Mr. Rhind

of Edinburgh, the Architect of that admirable work, the Commercial Bank in Gordon Street. Immediately after the British Linen Bank was completed, a lithograph drawing of it was published, showing Statues on the pedestals of the balustrade that crowns the main cornice.

(To be continued.)

THE Crediton Board of Guardians has decided to obtain estimates for carrying out certain alterations for the better accommodation of inmates in the Workhouse.

* There is a perspective view of the Western Club House in *The Art Journal* of October, 1889.



DETAIL OF A TERRA-COTTA FRONT: BY ROMAINE-WALKER AND TANNER.

wise have been commonplace, and, on the two others, to derive from this a legitimate apology for a change of spacing of voids and solids, necessitated from the frontages of the old and the new buildings having to each other (for the design) no proportional relation. This want of proportional relation has also stood in the way of a continuously regular division of the panels, windows, and trusses (a study from Piranesi), which form the frieze, and of the blocks in the main cornice. An addition to the Western Club House was not an inviting subject, and this not from the high reputation of the Architect of the original building,

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
July 23rd, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE programme of the sixth International Geographical Congress, which is to be held in London within the next few days, is practically complete. There are to be two distinct aspects to the Congress of Geographers, as to most other Congresses—the one the ostensible object of its assembling, the other social, and in this latter respect no effort has been spared to justify the traditions of English hospitality. The Duke of York, who is hon. president of the Congress, is taking a personal interest in its labours, and will be present at more than one of its meetings, as well as at the reception on the opening night at the Imperial Institute. The subjects to be discussed cover a very wide field and include such matters as photographic surveying, geodetic surveys, geographical definitions, and orthography, and cartography, which have a greater interest for Scientific Geographers than for the general public, but the discussion on the extent to which tropical Africa is suited for development by white races or under their superintendence is certain to attract a large audience.

RECENT centuries have so relentlessly waged war against the picturesqueness of mediæval Cities, that it is difficult for the fancy to reproduce the full effect of the aspect of Florence at the beginning of the fourteenth century. In every Street were stronghold Palaces, built for the needs of war as well as peace, flanked by lofty Towers, the shape of whose battlements gave sign to which of the great parties, Guelf or Ghibelline, their possessors owed allegiance. The number of Towers in Florence was to be reckoned by hundreds. The Florentine masons had inherited the old Roman art of solid building. They knew how to lay stones so that they should be as firm in wall or buttress as they had lain in their native beds. Palaces and Towers were built with a double wall of cut stone of blocks of uniform thickness, and the space between the sections of the wall was filled in with a concrete of lime and pebbles, by which the whole was bound together in a solid mass. The Towers were usually square, few were less than 100 feet, many were more than 200 feet in height. They were entered by a small door opening directly upon the narrow staircase which filled their whole interior space, with here and there a passage in the wall leading to a loophole, or to the door by which the defenders of the Tower, if assailed, might pass out at a safe height on to a moveable platform which was supported by brackets of stone.

For the purpose of inspecting a number of barrows, which have, by permission of Lord Hotham, been opened by Mr. Mortimer, of Driffield, a number of the members of the East Riding Antiquarian Society recently visited Scorboro', the residence for many years of the late Mr. James Hall, M.F.H. Mr. Mortimer explained that these barrows, which numbered about 170, and extended over five acres of land were no doubt part of a graveyard of early settlers, pre-Christian, probably pre-Roman; but whether early or late Roman he could not say. Some of them contained skeletons of

human beings, but there was no evidence of flint or stone implements or weapons. Members then visited the beautiful Church of Scorboro', built by Mr. Hall, between 30 and 40 years ago, and which, it was explained, being modern, had no Archaeological interest. Proceeding to the village of Leconfield, Mr. Boyle, of Hull, described the Church. He did not think a Church existed there before the Conquest, inasmuch as no mention is made of it in the Domesday Survey. The present Nave was no doubt the core of the original structure, which was built in Norman times, and which consisted of a Nave the width and length of the present one, and a small Chancel, which had disappeared. The Nave was without Aisles, but as time went on, and the population increased, the North Aisle was added, and this was done by piercing the walls, a style of alteration peculiar to that period—between 1290 and 1310, probably to save the roof of the Nave, which was a costly part of the building. The South Aisle was added a few years later. The Church contains a few specimens of stained glass of the fifteenth century. The Society was also invited to inspect the fine rectangular moat which formerly surrounded Leconfield Castle, one of the Yorkshire residences of the famous William De Percy, who came over with the Conqueror, and who was the founder of the Abbey of St. Hilda, at Whitby. Mr. Boyle gave an account of the history of this family, some members of which were buried in Beverley Minster.

WE learn from the latest issue of the *New York Science* that Mr. Archibald has offered to be one of the six men to build a Hall of Science for Syracuse University, at a cost of about \$150,000. The University has also been offered \$10,000 and \$100,000 as individual subscriptions towards a new Medical College. It is likewise worth knowing, if only for the sake of imitating it, that an Institute of Science has been opened at Lille, in France, which cost £65,000. This sum, with an endowment of £800 per annum, has been provided by the Municipal Council of the City, the Academy of Lille, and M. Philippart. Pure Science—natural and physical—is to be taught; the wise founders believing that practical—money-making—results will follow. But the higher education is what they aim at.

It is curious to contrast the continued dulness of the iron and steel trades in this country with their marked and rapid advance in the United States. The quarterly meeting just held at Birmingham and Middlesbrough, shows that little, if any, progress had been made in those districts during the past month, for though business in certain lines is rather more abundant, prices are no better, and in some cases even have receded. The average selling price of iron in the Cleveland district during the months of May and June is officially declared to be 4d. per ton less than for the previous two months. In the Staffordshire district the average may be fractionally higher, owing to the rise in blank sheets, but there is certainly no appearance yet of a coming boom in any part of the United Kingdom. In the United States, on the other hand, prices and production have been rapidly advancing for nearly three months past. Both crude and finished iron are quoted higher every week. The most conspicuous advance last week was in steel rails, which were formally advanced by the manufacturers 2 dollars, or 8s. per ton. This movement is ascribed to the growing demand for rails in the United States, where the indifferent success of railroad enterprise does not prevent large extensions and new enterprises when new lines of communication appear to be called for in the interests of Industry and Commerce. Rail-mills, long idle, are being rapidly put in condition for the resumption of active operations, and the makers of steel billets are increasing their output proportionately. The railway rolling-stock branch is sharing in the improvement, the additional requirements of the railroad companies already placed this season being estimated at over ten million dollars, or, say, £2,000,000. The advances in pig-iron and tinplate bars have also been very great, so much so, indeed, that these products have almost reached the limit up to which the present tariff gives them protection against outside competition.

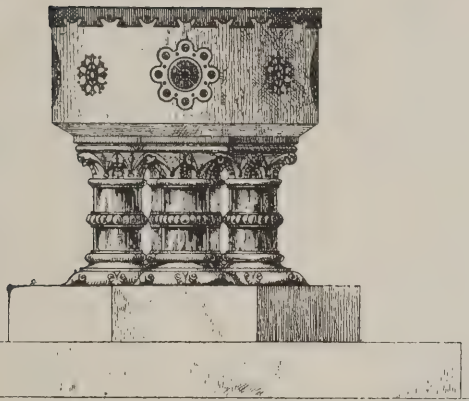
At the Cascades, a range of mountains in North America, and near the River Columbia, there is what is termed a "travelling mountain." The mountain is a triple-peaked mass of dark brown basalt, six or eight miles in length, where it fronts the river, and rises to a height of almost 2,000 feet above the water. This huge body is slowly but steadily moving down the river, as if in the future it would dam the Columbia and form a great lake from the Cascades to the Dalles. Indian traditions would point to immense movements of the mountains in this region long before the white man betook himself to Oregon; and among the early settlers the mountainous ridge was known by the name of "travelling" or "sliding" mountain. In its forward and downward movement the forests along the base of the ridge have become submerged in the river. Another curious phenomenon exists in Nevada. This is a travelling mountain of sands, which keeps constantly moving like an immense glacier. It crawls steadily along over valleys, never ceasing, the sands making a low musical sound as they rub against each other.

A NUMBER of Model Houses are in course of erection at Killamarsh, after plans by Mr. W. H. Wagstaff, Architect, Chesterfield. The buildings are arranged in semi-detached pairs, the front doors, placed apart from each other, opening into a lobby, which admits to the front room and living room, right and left. The front rooms are of convenient size, and having only one door, afford considerable wall space. They have projecting windows, with broad window bottoms, and stand for flowers or tree-pots, and have tiled register grates and tiled hearths. In each dwelling is provided a bath with water supply. From front to back each pair of houses occupy an area of about 1,000 square yards. There are three bedrooms on the first floor, each entered from the landing. We understand that these dwellings, which have been sanctioned by the Chesterfield Union Rural Sanitary Authority, may be erected at a cost enabling them to be let for little over the ordinary rent of cottage houses in the neighbourhood. The plain details given will strike most people conversant with colliery villages as a great advance upon the dwellings commonly occupied by that class.

"THE grace of detail and power of design manifested in the Rylands Library, Manchester, excel anything we have had among us for a very long time," writes a Manchester correspondent. "Now that the building is undergoing cleaning we can see better the colour of the stone; though the sense of pleasure is diminished by the knowledge that sooty grime will ere long make it very much the colour of all other stone in Manchester. So far as it has gone, the warm-coloured stone building next to the Union Club is satisfactory to the eye. It cannot be called powerful or original, but it is the sort of building that helps the dignity of a street. One regrets that this new building is not set back to the front face of the Union Club. And then, as it does project a yard or so before the Club, one is sorry again that this projection—which is intended to be for ever—has no special treatment, but is just left alone. A new facade in Spring Gardens that promised exceedingly well has, since it was favourably noticed in your columns, been surmounted by a name panel of a character and design that goes far to spoil the whole.

"THE Inland Revenue building in Deansgate, opposite the School Board Offices, by its newness invites a word, which is soon said. It is an utterly commonplace design of no interest whatever, and yet the building is not inexpensive. The little brick Church of St. Agnes, within the borough on the south side of Manchester, has just been enlarged. Two points may be noticed. It is a brick design, not a design for a stone church carried out in brick; and the new North Aisle has been so added as to be an integral part of the whole enlarged Church. It does not look merely stuck on. In Clarence Street, near Albert Square, is an addition of a sort that one welcomes as a relief to the dulness of street Architecture. A very plain Warehouse has its conspicuous corner covered with a sort of trefoiled stone oriel. We have yet to see

how it finishes at the top. The corbelling out at the base is a little weak in design, and it is a pity that at the sides, where the new stone joins the old brickwork, the new oriel is recessed, instead of projecting as one expects in such a case. The suspicion is excited that this may be just a dainty bit taken out of a sketch-book. If so, a little more pains should have been bestowed on it in making a harmonious



A DESIGN FOR FONT AND COVER, TWELFTH CENTURY.

marriage of the new with the old. In Market Street a building is going on that fairly takes one's breath away—a vast mass of wrought stone work miraculously standing upon nothing. The new School Board Offices in Chapel Street, Salford, which you have already illustrated, present a dignified street front. But there has been little attempt to suit the design to the material—terra-cotta."

SOUTH KENSINGTON MUSEUM seems for once to have outwitted the Louvre, for it has succeeded in carrying away from Paris a most interesting Collection of Mediæval French Wood and Iron Work. A portion of the Collection is destined for the Museum of Science and Art in Edinburgh, and another for Dublin, but it is not known yet how the Collection is to be divided. The purchase was made from M. Peyre, a decorative Architect in Paris, who managed to pick up a number of interesting spoils of the Revolutionary period. M. Peyre approached the South Kensington authorities some years ago, but he wanted too much, and the transaction fell through, until at last the South Kensington Trustees got what they wanted at what they consider a fair price. Mr. Purdon Clark, Mr. Armstrong, and Dr. Middleton went to Paris, on behalf of the Museum, to go through M. Peyre's collection, and they picked out 325 pieces at a cost of something like £11,000. The woodwork, some of which is in excellent preservation and most tastefully carved, belongs to the fifteenth and sixteenth centuries, and looks as if it had mostly come from ecclesiastical buildings. In one or two cases, where the *fleur-de-lis* figured among the carved work, it has been chiselled out, and the faces of the human figures have also been destroyed, this being, no doubt, the work of the Revolutionary period. Although the Collection is mostly wood, such ironwork as there is is very fine, and forms a very interesting contrast to the Collection of German ironwork in the upper gallery, which was brought

together last year. In the two types of workmanship, and dealing with the crafts of the middle ages, the national characteristics of the two nations are evident. The German work is mainly represented by massive gates, heavy candelabra, and the like, beautifully fashioned, but cumbersome to a degree; while the French work is, on the whole, of a more delicate texture. In many of the various types of ironwork contained in the two Collections there is a marked resemblance of style, pointing strongly to the fact that in the fifteenth, sixteenth, and seventeenth centuries the handicrafts of the two countries were in closer relation than in the present day, both emanating from the Italian School, and gradually striking out into opposite paths of thought and work. Among the best specimens shown in the new Collection is a quaint tripod stand, around the upper surface of which there is some very elaborate repoussé work. There are also examples of elegant candelabra, door knockers, and other ornamental house appointments, which go to make up an Exhibition that is at once unique and very interesting.

An important Railroad remaining to be built in the World is the one now being promoted to connect the eastern end of the Mediterranean with the railroad system of India. The route

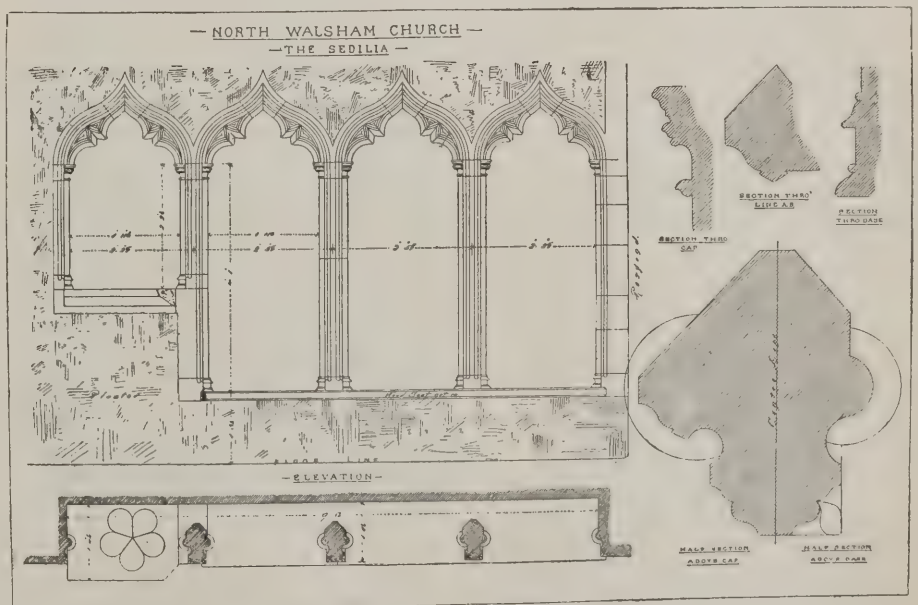
to be adopted is not that suggested by Sir. E. Watkin, but the one recently surveyed by Mr. C. L. Black. This route begins at Port Said and ends at Karachi, a little beyond the frontier of Beluchistan. The line will be 2,000 miles long.

M. WENUKOW, the Russian Geographer, has sent to the Paris Academy a description of a

shut off from the sea by a strip of land, but must have subterranean communication, for the tides of the sea are noticed in the lake, though in much diminished effect. Russian scientific men have discovered that the small lake contains three different kinds of water. On the surface it is fresh water, coming from a few brooks and from the rainfall; lower down it is salt water, and at the bottom sea water mixed with mud and sulphurous hydrogen gas.

A REREDOS erected in the Parish Church of St. Peter, at Landrake, is made entirely of veined and polished alabaster, while the statues and panels are of pure white Castellino marble. The Reredos proper rises up from the Chancel floor, and is plain polished alabaster as far as the massive Retable. Above this line the structure is divided into five compartments, the middle one being the larger. Each forms a recessed panel or niche. The centre is occupied by a cleverly-sculptured figure of Our Lord ascending in the midst of rays of glory and a visca piscis. In the side niches are representations of SS. Matthew, Mark, Luke and John. Above each figure is much beautiful and delicate tracery, and upon either flank and between every statue the face of the Reredos is exquisitely diapered. The whole is surmounted by a carved cornice, and pierced cresting. Above all, standing out in distinct outline on each flank are angels, and other heavenly beings stand at intervals. These have their wings down in repose, and hold inscribed scrolls. The wings or sides of the Reredos are somewhat lower than the main portion, and cover the wall space from the north even to the south. They, too, are divided into panels, two on each side. Within these the Lord's Prayer and Belief are engraved in the marble on the north side, and on the left the Ten Commandments. All the characters are gilded. A carved cornice and cresting surmount both wings. The Reredos has been made and erected by Messrs. Harry Hems & Sons, Exeter.

BORN in the quaint and beautiful old house of Wooser's Alley, in the ancient Abbey town of Dumfermline, Amelia Paton, the sister, friend, and fellow worker of Sir Noel Paton, has proved herself a true child of Art. She is descended from the Robertsons of Struan and the McDiarmids of Glen Lyon, families who are distinguished in the history of Scotland. Of Art training, strictly speaking, Amelia Paton had none, for in her young days women were not supposed to have pretensions to Art, and consequently her early struggles, to be allowed even to try her hand at modelling, were severe. She had unaided to work out her own



MEASURED AND DRAWN BY R. B. MARTIN.

singular lake on Kildin Island, which island lies near the coast of Russian Lapland, not far from Kola. It is a palæozoic rock separated from the granite continent by an arm of the sea. Upon it is a lake which seems to be entirely

Artistic salvation. Her first attempt resulted in a highly satisfactory head of her brother, then Mr. Noel Paton. Since that many other famous men have been her sitters, including Carlyle, Livingstone, Sir David Brewster,

Stanley, and Sir Roderick Murchison. The Livingstone Statue stands in the East Princes Street Gardens, Edinburgh, next the Scott Monument; while her magnificent Statue of Burns has the place of honour in the Square in Dumfries; but perhaps her best work is a Bust of Shelley.

IN the cemetery discovered at Syracuse a short time ago, the sepulchres which have been opened date mostly from the eighth and the earlier part of the seventh century B.C., when burial was general, although the custom of cremation was slowly making its way. The objects found in the tombs are of an interesting character. The cinerary urns, containing the remains of those who have been cremated, are richly ornamented. With the skeletons are found small terra-cotta vases of old Corinthian design, bronze and iron ornaments encrusted with amber and ivory, ear-rings, and scarabæi of glass set in silver. Another, but much less ancient, cemetery has been discovered in Macedonia. It is of the Roman period, and was laid bare by the construction of the Salonica and Dedeagatch scheme. In it have been found many coins bearing the effigy of the Emperor Probus (276-282 A.D.). The most remarkable work of Art that the site has yielded is a well-preserved bas-relief of the busts of three persons. It has been handed over to the Turkish Government, who now claims all antiquities discovered in the Sultan's dominions, and will be placed in the Museum of Antiquities in the Old Seraglio at Constantinople.

MUCH difference of opinion being found to exist among French experts as to the best kind of wood for use in street paving, the Paris Municipality has undertaken an experiment which will be watched with interest. The Faubourg Montmartre, one of the great arteries of the French capital, along which particularly heavy traffic passes all day long, is being repaired with no fewer than six different kinds of wood. These are pitch-pine, pine from the great swampy district in the south of France called the Landes—the inhabitants of which have to walk about on high stilts—teak, red karri, box, and a particularly hard wood from Borneo. Each of these materials has particular qualities of its own, such as impenetrability, non-slipping surface, and so forth. From time to time a Committee of experts will visit the place, and draw up a report as to the substance which best stands the rough wear and tear.

OLD Sèvres porcelain, including the famous Coventry vases and some specimens of the Queen's service at Windsor, came under the hammer at Christie's. The high prices anticipated were certainly realised in the case of single plates and dishes, and the total for less than 150 lots amounted to £15,964; but the vase and pair of jardinières, which in 1874 were sold as the property of Lord Coventry for 10,000 guineas, did not on the present occasion reach their estimated worth. The bidding ceased at 8,000 guineas, when the general impression seemed to be that they were bought in. The auctioneer's book assigned them to one Mr. Pilkington, but the highest offer in the auction room was from Baron Schroeder, who exceeded 7,000 guineas. They carried with them two remarkable record prices, as, after leaving the possession of Lord Coventry, they had changed hands privately from Lord Dudley's collection for £10,000. Those who visited Christie's during the past few days, or when these precious objects were on view in the same place twenty-one years ago, will know that their attractions consisted of rose-du-Barri ground with bands of green, richly gilt, and painted with figures and flowers by Morin. A single plate from the service, which formed a portion of that celebrated dessert service made for Louis XVI., afterwards purchased by George IV., and now at Windsor, brought 106 guineas, several others realising over 100 guineas each. These were of gros-bleu ground decorated with leaves, roses, and gold scrolls, and medallions with Classical subjects in the centre. An oval dish with paintings by Dodin fetched 255 guineas.

We are desired by the Turners' Company to state that their Twenty-sixth Annual Prize Competition in Turnery will be held at the

Mansion House, by permission of the Lord Mayor, on October 23rd, 24th, and 25th next. Prizes in money, medals, certificates, and, in the higher classes, the Freedom of the Company, will be presented to the successful candidates, according to merit. The competition will be in turning in hard and soft wood, xylomite, celluloid, vulcanite, and other materials, and there will be special classes for apprentices, amateurs, and schoolboys. The qualities considered in awarding the prizes will be beauty of design, symmetry of shape and utility, and general excellence of workmanship, fitness of the work for its intended purpose, good copying, novelty, and polishing, carving, and inlaying. The exhibits must be delivered at the Mansion House in the week ending October 18th, and the judges will be Mr. J. J. Holtzapffel, Mr. Alfred Bevan, Mr. W. Brinsley, and Mr. A. Murray, City Surveyor.

AN Institute erected by Mrs. R. W. Barbour, of Bonskeid, as a memorial of the late Rev. R. W. Barbour, has been opened and handed over to the inhabitants of Pillochry, N.B. The building, which occupies a central site in the village, is distinctly Scottish in character, and adds to the Architectural features of this Highland resort. It has a frontage of 55 feet, with a width of 50 feet, and has been so planned as to provide ample accommodation either for recreation, social intercourse, or intellectual improvement. The Institute, which was erected from plans prepared by Mr. J. Murray Robertson, Dundee, has cost about £3,000, and is a model of taste and comfort.

THE Royal Cornwall Geological Society, the Royal Institution of Cornwall, the Royal Cornwall Polytechnic Society, and the Mining Association and Institute of Cornwall, at their annual joint meeting were greatly interested by a demonstration of rock drill machinery at Wheal Agar. The new air-compressor recently erected on the mine by the Tuckingmill Foundry Company was inspected. A practical demonstration was then made of the "Rio Tinto" and the new "Little Hercules" rock drills, both of which are manufactured by the same company. The experiments were under the direction of Mr. McCulloch, the patentee. The "Little Hercules" drill bored 13½ inches in one minute; the water-supply became choked after about half a minute, air pressure, 70 lbs. With the "Rio Tinto" and "Little Hercules" working together, the former did 5 inches in one minute and the latter 12½ inches in 57 seconds, each working with 1½-inch drills. The new drill bored a horizontal hole 5 feet 4½ inches in 8 minutes, 53 seconds, or 18 minutes from start to finish; and a vertical hole 2 feet 11 inches in 6 minutes 38 seconds, or 9 minutes 30 seconds from start to finish. The "Rio Tinto" drill weighed 300 lbs., had a 3½-foot piston, and was 4 feet 6 inches long, and the new drill weighed 200 lbs., had a 3½-foot piston, and was 3 feet long. After the demonstration the party was entertained at luncheon by Mr. George J. Smith, J.P. Mr. Smith presided over a company numbering nearly 150, and proposed "Success to the four societies represented." Dr. G. B. Millett responded on behalf of the Royal Geological Society of Cornwall. The Mayor of Truro (Mr. S. Trevel) acknowledging the toast on behalf of the Royal Institution, said those joint meetings, if continued, would do a great deal of good in the county of Cornwall. He had watched with a great deal of pleasure the performance of the rock drills, and he hoped the enterprise of the Cornishmen who were now producing that new rock drill would be rewarded, and that it would become the drill of the future. The granite was one of the hardest specimens to be found in Cornwall.

ONE of the curiosities of Paris, which has a special attraction for astronomers of all countries, is the Mercury Bath at the Observatory. This Bath resists all vibrations of the soil, and its surface is in no way perturbed by the oscillation caused by the passing of the trains on the line to Sceaux. Before the advent of this invention the astronomers were complaining a good deal of the manner in which the neighbouring railway had affected their most delicate apparatus. At that period there was some talk that the Observatory should be

removed. It was not the first time that this idea had been mooted, but the reasons at bottom were not exactly concerned with the advancement of Science. They had more to do with personal feeling. Once again the proposal is made by certain Municipal Councilors to suppress the Observatory, or, at all events, to sell the land which was annexed to it in the time of Le Verrier. The revival of the attack has led to profound emotion in scientific circles.

ALTHOUGH there was no striking achievement to record, said Mr. Macmillan at the recent annual meeting of the British School at Athens, whose claims we urged in our last issue, the School has had a fairly good session. Seven students were admitted, or re-admitted. Mr. E. F. Benson, besides continuing his work on the cult of Asclepius and the fourth-century heads at Athens, took part in excavations at Alexandria. Mr. J. L. Myres carried out researches in Cyprus and Crete. Mr. R. Carr Bosanquet made a careful study of the lecythi in Athens. Mr. E. R. Bevan, like Mr. Benson, was engaged in excavations at Alexandria. Mr. John Duncan and Mr. Adam Fyfe Findlay worked at questions bearing on the history of Christianity, thus proving the usefulness of the School in a department not hitherto within its sphere. Mr. J. E. Brooks did preliminary work. Mr. Herbert Awdry, Assistant Master of Wellington College, went through a course of Archæology, thereby emphasising the value of the School as an adjunct to the ordinary Classical education. No excavation was undertaken in Greece by the School, funds being too scarce. Owing to the generosity of Dr. Edwin Freshfield, one of the trustees of the School, there was at last a good prospect of at least part of Schultz and Barnsley's admirable work on Byzantine Architecture being published in the coming year.

LORD LINGEN, the chairman, in moving the adoption of the report, disclaimed all pretensions to the name of Archæologist. He could only speak as a scholar of fifty or sixty years ago. In those days, Archæology, as a Science of objects which appealed to the senses, and as it now appeared in the publications of the Hellenic Society and the British School at Athens, hardly entered into ordinary Classical study. There were several reasons for it. The all-important task of settling the text of the Greek Classics and the rules of grammar occupied nearly the whole time of the scholars who adorned the end of last century and the first third of this. Their labours almost necessarily turned the Classical instruction of the time towards verbal criticism. Besides, travelling abroad was difficult, costly, and seldom undertaken by schoolmasters. Museums were fewer and poorer than now; books of illustration much more expensive. One who had not actually seen it could hardly realise the enormous difference between the Classical work of half a century ago and the Classical work of to-day with all its realism. But we should dearly purchase our increased archæological knowledge if it led us from the study of that grand literature which taught the life and significance of ancient remains. The Archæology to which the British School at Athens offered a home was that of the scholar, not of the dealer.

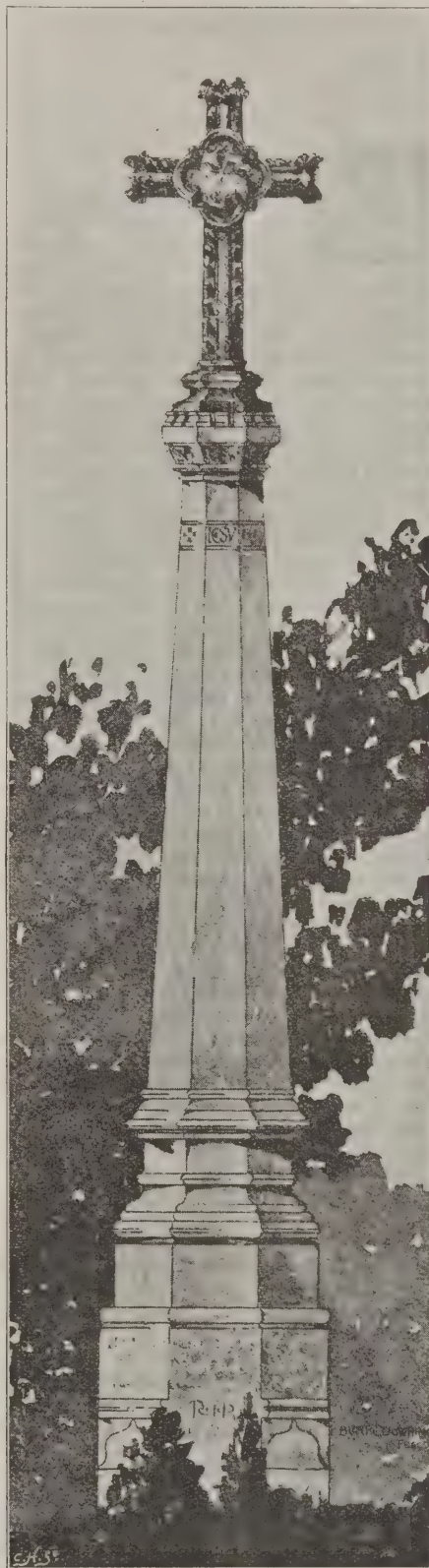
THERE is some prospect that at last London's finest Boulevard—the Thames Embankment—will be lighted by electricity. An attempt was once made in this direction, but it was when electricity as an illuminating agent was in its infancy, and the experiment was a failure. But experience has shown that the electric light can nowadays be relied upon, and, while several of London's great arteries have abandoned gas for the arc lamp, it is a pity that the Thames Embankment should lag behind. The cost of the work, it seems, including the lighting of Westminster and Waterloo Bridges, would be about £16,000, this being nearly £4,000 less than an estimate submitted last year. The difference is accounted for largely by adopting less ornate buildings for the generating plant and omitting the gardens from the lighting scheme. It is expected the London County Council will give its sanction to the scheme, and if so, the work will be taken in hand at once.

THE members of the Photographic Convention have had a most successful Annual Meeting at Shrewsbury. On Wednesday last a good proportion of the members visited Haughmond Abbey and the adjacent hill, the leaders being Messrs. Burson, Ebrall and Hill. On their return the annual dinner took place, followed by a smoking concert, at the Music Hall. During the day, meetings of the Committee and the Council were held. On Thursday the members had a full day's excursion. They divided themselves in the morning into two sections, one of which visited Church Stretton, and secured some photographs of the picturesque hills in the neighbourhood, while the other had a circular ride through Atcham, Wroxeter (where the Roman ruins of Uriconium are situated), thence to Cressage and Acton Burnell, where a very early Parliament was held. Returning to the rendezvous at Shrewsbury, Mr. F. R. Armytage, M.A. (Organising Secretary of the County Council), read a paper on "The Camera as an Aid to Technical Instruction;" Mr. Andrew Pringle, F.R.M.S., one entitled "Ten Minutes of a Life History," being an application of photomicrography; and Mr. A. Maskell one on "Pictorial Photography, the New and the Old."

ON Wednesday last Mr. Robert Bradbury, Surveyor to the Rotherham Rural District Council, who for over five years has held the appointment of district main road surveyor in the High Peak of Derbyshire, under the Derbyshire County Council, was the recipient of a handsome case of mathematical instruments, presented to him by the county surveyor, Mr. J. S. Storey, and two of his assistant surveyors, Mr. D. Robinson, Crich, and Mr. R. C. Cordon, Duffield. Mr. Bradbury has had charge of a very large district in the county, and he has given great satisfaction in the performance of his duties.

THE York new Sewerage Works, which were commenced four years ago, were on Thursday opened by the Lord Mayor, Alderman W. McKay. For many years numerous complaints were made of the sanitary condition of the city, and when the York Extension and Improvement Act was passed in 1884, some thousands were added to the population and eleven miles added to the city roads. The added area was in a most insanitary condition, and when the Act was passed it was understood that the Corporation of the city should provide a proper and efficient scheme of drainage. Mr. Jas. Mansergh, the eminent sanitary engineer, was called in, and he prepared a scheme which was subsequently extended to include the added area. Intercepting sewers have been constructed, and the existing branches have been connected to the new system, so that instead of the sewage flowing into the rivers or streams, it is now conveyed by gravitation to the eastern boundary of the city on the left bank of the river, to the Pumping Station at Fulford. At this point the main sewer is a little more than 16 ft. below summer level of the river. The total length of new sewers is 17 miles 527 yards. The pumping plant consists of two overhead vertical cylinder triple expansion engines, working single acting ram pumps, each engine capable of delivering 4,320,000 gallons of sewage per day, through the 27 in. rising main to the tanks at Naburn. In addition, there are two engines and centrifugal pumps, to be used in times of heavy rain, each capable of discharging 14,400,000 gallons per day into the river. Steam is generated in three Lancashire boilers, 6 ft. 6 in. in diameter and 22 ft. long. In ordinary dry weather one of the triple expansion engines and its pumps will deal with the sewage, while the second one is a stand-by in case of repairs, or for dealing with moderate rain storms. When all the pumping plant is at work a little more than 37,000,000 galls. per day can be lifted out of the sewers. The works for the treatment of the sewage have been constructed on the left bank of the River Ouse at Naburn, a little more than two miles below the Fulford Pumping Station. These works consist of six precipitation tanks, which have a total capacity of 1,500,000 gallons, so arranged as to be used either for the intermittent or the continuous process. The tanks have been placed at a sufficient elevation to allow of the clarified liquid being distributed over adjoining land for filtration. The estimated total cost of

Watt and Co.; Fulford Pumping Station, found the work for which the City Council has obtained borrowing powers is £191,100, while the expenditure up to the present time is £186,120. The resident engineer under whose superintendence the works have been carried out is Mr. James McKie, A.M.I.C.E., and the works have been executed by the following firms:—Main intercepting sewers, Mr. A. Kellett; Fulford pumping plant, Messrs. J.



"IN MEMORIAM": DESIGNED BY
BURKE DOWNING.

dation and wells, Messrs. Parker and Sharp; Fulford Pumping Station, building, Mr. A. Kellett; Naburn Treatment Works, Messrs. Parker and Sharp; sludge pressing plant, Messrs. Goddard, Massey and Warner.

MR. W. BURGESS, of the Tuckingmill Foundry, in a paper on "Economy and Speed in Air-compressing and Rock Drilling," described the

air compressor erected at Wheal Agar. This engine was the first made on the lines of Mr. McCulloch's patent, and such being the case, it was impossible to avoid some small defects of detail. Whatever had been found wrong had been altered and improved, and none of those alterations had in any way affected the principles on which it was built. It was a generally accepted datum that hitherto it had taken 10 cwt. of coal per day to drive one drill. They had done it with 5 cwt. They had driven six drills with a weekly consumption of coal of from nine to ten tons, and these figures were more or less proved by facts that could not be controverted. For the four weeks ending March 23rd, a period in which they drove four inches short of 38 fathoms of levels, their coal cost them per each fathom of ground driven 16s. 0 3/4 d., and if there had been given them the full amount of work expected under their agreement with Wheal Agar, their cost per fathom would have been still further reduced to 12s. 6d., and all these figures included the supply of coal to two forges used to sharpen their bits. It had been also generally accepted that to arrive at the total cost of rock boring to the mine they must double the price given to the miner for doing the work. The economiser was no new invention. It had been in use fifty years or more, and they recognised in its use a save in fuel, but the strongest reason that actuated them in putting it down was the fact that by its use the life of the boiler was considerably lengthened, but he denied that the economy in fuel was due solely to the economiser. The "Little Hercules" new drill which had been at work was a short and light drill, a combination which, when they took into account its effective power, had never yet been attained.

THE re-opening, after restoration, of the ancient Parish Church of St. Luke's, Farnworth, near Widnes, took place yesterday, the ceremony being performed by the Bishop of Liverpool. The work has been carried out under the supervision of Messrs. Austin & Paley, of Lancaster, and includes the building of new Choir and Clergy Vestries on the north side of Chancel, with Heating Chamber under; cleaning and repairing the stonework and roofs; the abolition of the Galleries at west end and portion over South Chancel Aisle, and the opening out of the Tower Arch into the Church. The old "box pews" have also been swept away, and the whole area of the Church covered with bed of concrete, so as to exclude all ground gases arising from former interments, and new floor laid throughout—the Chancel with encaustic tiles, the seat blocks with wood blocks, and the Aisle passages flagged. The heating is effected by hot water on the low pressure system, fresh warm air being introduced through trenches in the Aisles, with additional coils above ground behind the seat blocks. The old oak panelling has been adapted to form a dado round the Church. The new benches are of oak, those for the Choir being finely carved with traceried elbows, similar to the old example found in a garden at Farnworth. The tops of the desk elbow are finished by carved emblems of the Evangelists St. Luke and St. John. These were cut by Mr. Bridgeman, of Lichfield. The Pulpit is of oak, with stone base, the upper portion being panelled, with canopied and traceried work, the two octagonal angles containing figures of St. Luke and St. John. The upper portion of the Pulpit, the Lectern and Sedilia, also the carving of Choir Stalls, Altar Table and Rails, Organ Case and Chancel Screen, have been executed by Messrs. J. Hatch and Sons, of Lancaster. The Organ itself is by Messrs. Connacher and Co., of Huddersfield, and is a gift. The west window is filled with stained glass, by Messrs. Shrigley and Hunt, of Lancaster. This, and also the Pulpit, is the gift of Miss Riding and her sister. The heating has been carried out by Mr. H. Wormwell, of Accrington, and the general Contractors for the work were Messrs. G. Woods & Sons, of Bootle, Liverpool. The cost has been about £3,000, exclusive of gifts.

WE have to acknowledge the courtesy of Messrs. Bemrose & Sons in placing at our service the photo-engraving of the Roman Thermae at Fiesole which appears in the current issue of the *Reliquary and Illustrated Archaeologist*.

"THE DESTRUCTION OF EDINBURGH."

Pressure upon our space compels us to hold over a number of further letters upon the subject.

The majority of our Correspondents continue to be unanimous in their condemnation of this monstrous scheme. We can assure our readers that we are not allowing the grass to grow under our feet in the matter.

THE A. A. VISIT TO BLYTHWOOD AND STANSTEAD.

By rail to Bishops Stortford, then, in carriages provided by Sir James Blyth, to Blythwood, and finally, a visit to the Farm, Dairy, and new Church composed last Saturday's "summer visit." Some score of A. A. men joined the excursion, and after being hospitably entertained at lunch by Sir James Blyth, they were conducted by Mr. W. D. Carøe to the new Church, or rather, fifteen year old Church with new Tower. Both are from Mr. Carøe's designs, so that members had an opportunity of comparing the President's later with his earlier methods. The interior of the Church is most successfully treated, and elicited general praise from the visitors. The Farm Buildings, where Sir James keeps his famous herd of Jersey cows, were next visited, and then the Dairy (in itself well worth a visit) which has been illustrated in this Journal. The Misses Blyth afterwards dispensed tea. A pleasant afternoon was concluded by a drive to Stanstead, the party returning to town in the evening.

COMPLETION OF THE ALBERT MEMORIAL, EXETER.

THE Memorial in Exeter to the late Prince Consort—the Albert Museum—commenced thirty years ago, is complete. On Saturday the newly added portion, the south-east Wing, was opened by the Duke of Devonshire. This building, of which Devonians generally are justly proud, stands without a rival in the West of England. It may be said to be the result of nearly half a century of labour on the part of Devonshire men. The structure has been erected piecemeal, and the addition of the present Wing has made it complete. There is little probability, however, of the new Wing being in entire use until October next. The style of Architecture deviates slightly from that of the old building. The walls are of Pocombe stone with Hamhill dressings; the huge columns in front are of Devonshire granite polished. The tracery of the windows is of Hamhill stone. From the main Entrance of the Museum in Queen Street, there is a passage way, on each side of which there is a lofty Class Room, 30 feet by 22 feet, with wooden dadoes, and floors of wooden blocks—which, by the way, have been used throughout. On the Paul Street side there is a spacious Museum Room, 57 ft. 9 in. by 41 ft. 6 in., and here it is proposed to display the Natural History Collection, although, it must be confessed, it is not well adapted for such a purpose. With a view evidently of getting as much light as possible—and undoubtedly it is a splendidly lighted room—the Architects have provided many windows. Only one of the four walls is without either windows, an arch, or a door. Immediately above the Museum Room, there is a very large apartment, set apart for the Art Gallery. There are also two well lighted Lecture Rooms, one about 48 feet by 22 feet, and the other 48 feet by 27 feet. At the rear of the ground floor Class Rooms and approached by steps is a small Laboratory adapted for the preparation of specimens, but which will be used at present in connection with technical education. The Laboratories are fitted with an air pump, balances, and numerous apparatus for the use of the students in the prosecution of their studies. The premises throughout are fitted with the electric light apparatus, and they are to be heated with hot water by the high pressure small bore system. The Architects are Messrs. Fulford, Tait and Harvey; the builder Mr. Woodman. Messrs. Easton and Sons supplied the stone-work. The carving in connection with the new additions has been carried out by Messrs. Harry Hems and sons.



MEN WHO BUILD.

No. 22.

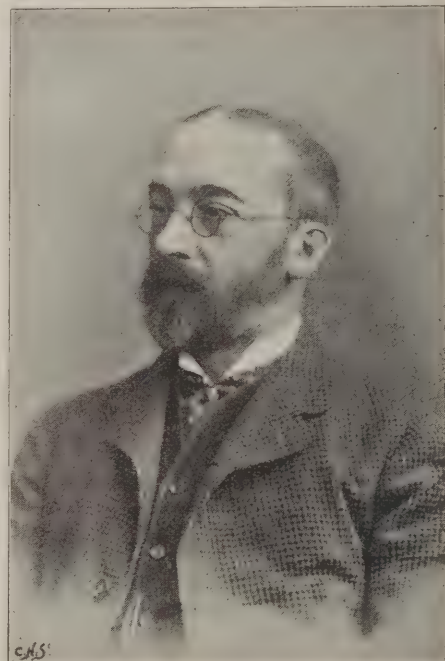
MR. SOMERS CLARKE.



ALTHOUGH a bachelor of the deepest dye, Mr. Somers Clarke has surrounded himself in his Drawing Room at Whitehall Court with all the little knick-knacks which appeal so much to woman's heart. But Mr. Somers Clarke is, in his artistic connections, a courageous man, courageous enough to cover his floor with the ordinary plain linoleum of commerce, which his hand-maiden has honestly polished until it is a shiny black, much like a negro's face in its Sunday aspect. Anything more charming upon a floor it would be difficult to imagine, and the cleanliness of the hard surface over the velvet piles and Turkey abominations one usually treads upon is strikingly manifest. Dust has its greatest enemy in Mr. Clarke, and in face of the possibility that you may be converted to his methods of attacking dust, he takes you over to one of his fireplaces to dissect the gas apparatus he has come to the conclusion, after a trial of many years, is the best. He uses a stove somewhat like the system of Dr. Pridgen Teale's, *i.e.*, with a gathered throat, arranged by bringing the fire brick back well over to the front of the grate, so that, until the adjustable hood is pulled out there is only an aperture an inch and a-half in depth. But in cases where the ordinary registers or slow combustion stoves are fixed a sheet iron hood attached to a four-inch pipe need only be inserted up the chimney to ensure a perfect draught. After experimenting with all manner of burners—atmospheric and others—Sugg's have, in his opinion proved themselves to be the best, and he is never tired of singing their praises. It is because of the smoke and dust which London revels in that Mr. Somers Clarke spends the winters of his life in the lands of the ancient Egyptians, where he can steep himself to the lips in Egyptology and join exploration parties through the livelong day. Upon the grand piano—which serves in moments of forgetfulness or of extreme pressure as a very excellent table for the reception of drawings—lies a formidable pile of exploration plans, the result of last year's work, to which Mr. Clarke hopes to add during the coming winter in the East. Throughout the whole of his professional career Somers Clarke has taken an intense interest in the history of Architecture, and, as a very prominent member of the Society of Antiquaries, has devoted the greater part of his time to the study of ancient work, upon the restoration of which there is no more capable authority in England. He is widely travelled, and Europe is but a book of reference to him.

It is pleasant, from the topmost windows of Whitehall Court to gain a panoramic glimpse of the west of London. Colcutt's Tower of the Imperial Institute stands up a prominent figure in the picture, and beyond it that awful Wheel at Earl's Court—the engineering Frankenstein that objects to go round—intrudes itself upon the view. Nearer home one gets a peep at Messrs. Leemings' Admiralty Offices, and disappointing they are, now that one can judge them "in

the flesh." But as nothing could be worse than the Hotel Metropole—except it be "Balfour's Folly," in the Adelphi, which is mercifully unseen from Mr. Clarke's windows—one can forget the disappointment in the picturesque picture that spreads across the green of the parks and loses itself amid a maze of towers and steeples far beyond the limits of the Great City. Of the "destruction" of that City Mr. Somers Clarke speaks with saddened heart—of the want of suitability in most things Architectural, of the ruin of what is good, and the arrogance of what is bad; it pains him when he thinks of it. Of the veneering propensity of modern work he also speaks—the veneering of handsome fronts tacked on to bald and



unconvincing buildings, without an atom of Architectural feeling anywhere but on the street elevations. There is little hope for Architecture in our cities if no more sincerity than this is ever to show itself.

From the want of dignity of London Buildings it is but a short drop to more interesting things; and a pleasant half-hour is devoted to other lands where Architecture is more an Art of the Million than it is here, and where its study and its practice are more encouraged. And then to the far East of Egypt—dear, delightful Egypt, where Somers Clarke revels while London is bathed in fog and mist. He works there, freed from the depression of the English climate, and when he goes back later in the year he goes back to one of those delightful craft that float lazily upon the Nile, and takes the place of the English house boat, which has never yet lured an Architect to make his home.

Amongst so much fine work up and down the counties, so many fine restorations, so much historic research, you cannot specially note one work more than another. St. Martin's Church, at Brighton, is perhaps the largest of Somers Clarke's individual efforts—plain and bold in its external aspect, rich and dignified within. With his partner, Mr. J. P. Michlethwaite, there is an extraordinary bond of unity of conviction between the two men, who have produced between them much sincere and fine work, honest in its purpose and great in its truthfulness.

It has been resolved to recommend the erection of a Dome on the Calton Hill, Edinburgh, to provide accommodation for the large telescope at present in the City's temporary premises at Murrayfield.

THE COLOURS OF IRISH MARBLES.

THE colours of the marbles of Ireland are almost as numerous as those obtained from Italy. The dark colours vary from jet black to dark dove colour, purple, blue and grey. The light colours vary from the pure snow white, cream coloured, pink and light grey. The variegated consist of the serpentine,

are extensively met with, and belong to the formation familiarly known as the lower lime stone. The merchantable beds of the best quality are met with in the Counties Galway, Limerick, Carlow and Kilkenny; in the counties of Mayo and Waterford black marble is also met with. At the former places they have been extensively worked. Wherever the black marble beds are met with they

marble are frequent. They are generally more or less marked with fossils, and inferior to those beds belonging to the lower or light coloured limestone formation, and seldom receive a good polish. Wherever the limestone formation prevails in which the marble beds occur, the economy of raising it is dependent on the depth of over-laying rock or soil which requires to be removed, and of the



ST MARTIN'S CHURCH: LEWES ROAD: BRIGHTON: SOMERS CLARKE JUNR. ARCHT

black and white veined, mottled, and those marked with fossil organic remains. The serpentine is excluded, from its common use for the purposes to which marble is applied, and from its being so commonly called the "green marble," although it is not, strictly speaking, a marble. The black marbles, which are those of most value in Ireland,

are assorted with limestone beds, and the difference in quality appears almost accidental; some of the over or under-lying beds often present a strong contrast in the quality of the stone. In other places there is a gradation in character from the adjoining ordinary limestone to the fine marble. In the impure limestone formation of the calp series, beds of black

demand which exists in the neighbourhood for the common rock, either for masonry or burning into lime. In some localities the limestone rock itself more than repays the cost of removing it, and in those localities where this formation prevails, these considerations and the quality of the marble beds determine the economy of raising it.

A YORKSHIRE ELIZABETHAN HOUSE.

THE DESIGN ATTRIBUTED TO INIGO JONES.

AT Bridlington, Yorkshire, last week, Mr. W. H. St. John Hope ciceroned the members of the Royal Archæological Institute to what now remains of the once famous Monastery. The Western Entrance of the Priory Church—considered to be one of the best specimens of the Architecture of the time of Henry VIII.—the decorated windows, with tracery consisting of combinations of trefoils and quarterfoils, the North Porch, rich in the variety and beauty of its mouldings, and the clustered Pillars were each in turn examined. The members then proceeded to Burton Agnes Church, subsequently, by the courtesy of Sir Henry Boynton, inspecting the Hall, which is the finest specimen of Elizabethan Architecture extant in Yorkshire. Mr. J. Bilson acted as chief interpreter, and gave as much of the history of the two structures, as well as of the former Lords of the

the design of the house, and Murray made the precise statement that it was added to and somewhat altered by him in 1628. He had been unable to find any authority for this idea, which was certainly not confirmed by the building itself. The first alteration appeared to have been the insertion of the sash windows in the principal front and the alteration of some of the gable windows, which they might safely attribute to Sir Griffith Boynton, who improved his seat at Burton Agnes at the end of the seventeenth or the commencement of the eighteenth century. Internally the Hall has been considerably altered, but it contains two fine features in it chimney-piece and screen. The great chimney-piece contains representations of the five senses, and above a large relief of the wise and foolish virgins. It bears the arms of Sir Thomas Boynton of Barmston (1544-1582), and of his wife, Frances Frobisher, a cousin of the celebrated navigator, and his fourth wife, Alice, daughter of Nicholas Tempest, of Helmesden in the bishopric. The chimney-piece must

tion, but that left room for a good deal of misconception. There was a certain amount of what might be called civil life—towns enjoying what he might call the Roman municipal constitution, though few in number. Yorkshire was one of the poorer counties in the matter of Roman remains, for where they existed they were almost entirely military. York seemed rather to contradict what he had been saying, as that was a town which possessed a full municipal constitution. With the exception of London and Colchester, they found more relics collected in the Museum at York illustrative of Roman life, and the furniture of that life, than were to be found in any five or six other places. With the exception of York and Aldborough, there were very few remains of Roman villas in the country; but the way one had to regard these towns was not as definite parts of Roman civilisation, but merely as towns in which the elements of civil life blended with the military. In other places in the country they found traces of military forts arranged along the roads. In nearly all cases



ST. MARY'S CHURCH, STRETTON, NEAR BURTON-ON-TRENT: SOMERS CLARKE & MICHELETHWAITE, ARCHITECTS.

Manor, as he was able to do in the time at his disposal. Burton Agnes Church, dedicated to St. Martin, was, Mr. Bilson explained, one of the Churches in the patronage of the Abbey of St. Mary, York. Traces remain of what he called the first Church, the aisleless Norman Nave, which no doubt had an aisleless Chancel, with square East End, belonging to the Early Twelfth Century. Norman masonry remains at all four angles of the Nave. Under the South Aisle of the roof are a few old Norman corbels. In the Churches of the Wolds this type of the Church with aisleless Nave and Chancel, apparently all Early Twelfth Century, were very common, but the Chancel was to all appearance completely rebuilt at the restoration effected by Bishop Wilberforce in 1840. Great interest was shown in the Chapel in the North Aisle containing the Tomb of Sir Roger de Somerville, the founder of the Church, and first owner of Burton Agnes. In front of the Hall, Mr. Bilson pointed to certain figures in the stone-work indicating that it was erected in 1601. Many of the guide-books, he observed, credited Inigo Jones with

therefore have been removed from Barmston where the Boyntons had a large house, only a fragment of which now remains. The Architecture of the earlier English Renaissance has, said Mr. Bilson, received far too little attention from archæologists. Yorkshire, it was true, was not rich in houses of this period.

"ROMAN YORKSHIRE"

Was the subject of a more or less impromptu address by Mr. F. Haverfield, at the evening meeting of the Historical Section of the members, held in the Royal Hotel, Scarborough. South Yorkshire, he observed, seemed to have been, more or less, the boundary of one-half of the Roman province, and one was therefore justified in speaking of it as an actual division with some meaning in Roman times. There was definite evidence of a technical kind that York was occupied prior to 100 B.C. In the year 124 Hadrian had built his great wall from the Tyne to the Solway, and York had been included in the definite area of the Roman dominion. The occupation of Roman Britain was generally described as a military occupa-

these were occupied by garrisons, and were intended simply and solely for military duties. In the districts around these forts there was no doubt crime and disturbance. Near to Leeds some coin moulds were discovered which rather indicated that at some time or other the Britons were engaged in the recesses of the moors forging Roman coins. Detailing the way in which Roman Yorkshire passed into the English Yorkshire as we know it today, Mr. Haverfield pointed out that when the Romans left the island there remained a considerable number of the population who spoke the Roman language and bore Roman names. In Yorkshire, chiefly because of the hills, the Roman element seemed to have lasted longer than it did elsewhere. The small kingdom of Elmet, in the Leeds district, seemed to have maintained itself against the attacks of the Saxons right down to the year 625, and when it was conquered it was at a time when the ferocity of the Saxon conquest had somewhat abated. The conquest of Britain by the Saxons was, in fact, a much longer business than was generally supposed.

IN NORTH FRANCE.

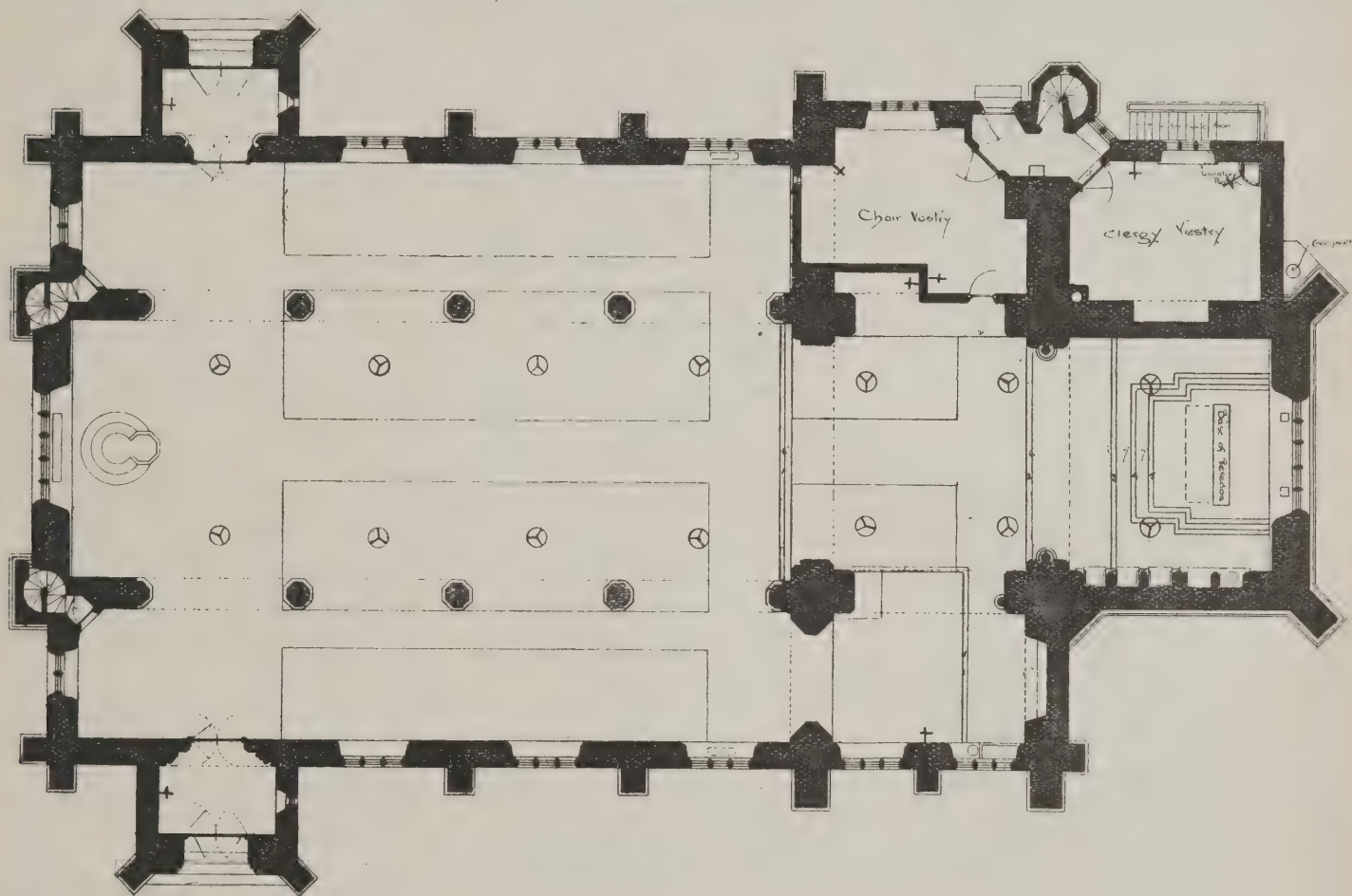
LAON AND ITS CATHEDRAL.

THE Church stands in one of those pleasant bright little French towns of narrow streets and white houses, its west front towering above the cobble-paved place where the women huddle on market days in their blue gowns and white caps, their baskets, gorgeous with a wealth of fruit, resting on their knees. But, above the ordinary attractions of a Cathedral town, Laon has also the advantage of one of the finest situations in the North of France. Set upon a high hill rising like an island from the surrounding plain, with a picturesque circlet of walls and ramparts and avenues, it has throughout its history, from the time of the Romans to that of the Franco-Prussian War, been a fortress of great importance and has faced innumerable sieges. In spite, however, of its beauty and interest, few of the thousand Englishmen who hurry past it on their race to or from the South stop to pay the town a visit. If you are awake so early, look out as the train pants along the grassy way from Rheims

trying to force his elbow through the bars. Then with little warning appears one of the finest groups in the town. A great broad flight of steps, flanked at their summit by two massive gate piers, leads up to the Cathedral. Children are playing at hide and seek in and out of the walls, and old women resting against the gate piers after climbing the steps. The sentries are on duty and the masons working at the restoration of the Church, and the background to it all is the Northern Transept, with its severe triple Portal and great rose above, while the group is completed by the Chancel of the Church, and the steep gables and round Towers of the old Bishop's Palace. This latter has gone through many vicissitudes since the commune murdered its bishop, and burnt the Cathedral in the early years of the twelfth century. The present building is one of the most beautiful remnants of the domestic work of the thirteenth century left in France, and its double Chapel dates back to the twelfth century. But now these are disused and serve chiefly as a Museum, and the great Hall has been divided

white road that winds up into the town from the plain below and disappears through the quaint Porte d'Ardon, a venerable thirteenth century Gateway, with its round *tourelles* at the angles of a steep tiled roof.

The Church of St. Martin is well worth a visit (it is older than the Cathedrals), and the Hotel Dieu, and even the great Barracks at the western end of the town, and another old Gate with a Leaning Tower close beside it, to say nothing of the views and walks beyond. But you have no time for these, so, after entering through the Porte des Chenizelles, turn to the right and tread the thronged narrow streets until you stand before the West Front of the Cathedral, now a Cathedral no longer. The first thing that strikes one on entering the Church is its generally English characteristics. In height it compares rather with Salisbury than with Amiens. It has a square east end and beautiful lancet windows, filled with richly coloured glass, with their rose above. Not that this was the original termination of the Choir. It was circular and much shorter. The Transepts remind one of England, with their bold pro-



ST. MARY'S CHURCH, STRETTON, NEAR BURTON-ON-TRENT: PLAN BY MESSRS. SOMERS CLARKE & MICHLETHWAITE.

and you will see rising abruptly before you the rock of Laon shimmering in the fresh pearly light of morning. Its outline is clothed in trees, its top crowned by white walls, and then, reaching high into the sky, soar four Towers such as may be seen nowhere else in France or, for that matter, in Europe, that slowly change places and group themselves in half a dozen ways as the train passes on and finally pulls up in the Station at the foot of the hill. Then get out, for at any rate you can comfortably have three hours there and meet the afternoon train for Calais at Amiens. Better spend much more time, but even if this is all that can be spared, don't drive up. Walk, for you can take an occasional rest as you pass through the vineyards and gardens that clothe the hill, to glance back over the great plain that stretches far and away in one waving sea of cornland. Above frown the old ramparts, and behind them rise rows of white houses, some still retaining their mediaeval gables and niches and round *tourelles*, others of Renaissance or later date, with here and there the shaft of a dejected Gothic window peeping out, like a prisoner

into the civil and criminal Courts, for since the days of the Revolution the Bishop has gone and the lawyers have taken his place. Admire the steps and the great Transept and the Palace, and still keep on underneath the frowning fortifications, in the shade of the trees that climb down the hill to the peaceful little village of Vaux, which lies below. And just above the red-roofed village turn and look back at the Cathedral, framed in a setting of green acacias. You are almost due east, and though the more imaginative finish of Amiens or Chartres or Rouen, with octagonal clerestory and interlacing of buttress and pinnacle above the crown of Chapels, is missing, yet there is a simplicity and strength about its square east end (almost unique in France) that forms an appropriately solid base for the hardy Towers that soar from behind it. It is a delightful walk round the shady glaciis in the early morning, before the sun beats down too hotly. And, if you do not wish to enter the town too soon, still follow the walls and on along the alleys, where, with bands and illuminations, the fetes of the town are kept, until they lead into the

jection, and the piers of the Nave are of a form quite unusual in France. But for all its English appearance inside, the exterior is essentially French, and so is the detail of the interior—French of the very best type, of the early years of the thirteenth century. So are the Cloisters, quaint and beautiful in design and arrangement; so is the Baptistry Chapel, in itself quite unique; and so are all the Chapels of the Nave. But all round the Church in front of the Chapels are Renaissance Screens, a tribute to the taste of the sixteenth century, wonderful in their variety and design, but terribly out of place in the greater work around them.

A CEREMONY of considerable historical interest has been performed at Northbourne, near Dover, by the Bishop of Dover, in the dedication of a Lichgate in connection with the Parish Church. The special interest attaching to the Lichgate is that it is erected at a spot known as St. Augustine's Walk, where St. Augustine settled after landing at Ebbsfleet, near Ramsgate.

THE ART OF ILLUSTRATING IN BLACK AND WHITE.

MR. JOSEPH PENNELL has launched another of his slashing letters against the ineptitude of Art criticism, and the "Yellow Book" has found him a valiant defender. A London Contemporary glories in the fact that this much-discussed quarterly has laid aside the follies of its misguided youth, so far as illustration goes, and that its "Art is up to a fair standard." I am sorry, says Mr. Pennell, that you prefer the platitudes of the imitator, the *affiches* of the advertiser, even though, of course, with all people of any Artistic intelligence, you fail to understand why Mr. George Moore or Mr. John Lane should court the presence of the amateur baronet. Unaccountably, somehow, the really good work that is in the "Yellow Book" you do not refer to at all. But this want of reference to work which is good seems to be inevitable, and I may be quite wrong in even thinking that anything in this number is worth looking at. I cannot help wondering how, had some of us been working twenty-five or thirty years ago, we would have received the illustrations contributed to what really stood for the "Yellow Books" of that day. We know perfectly well what Mr. Ruskin thought of them. We have his opinion, written down in letters—luckily they are not as durable as brass—of Charles Keene and Fred Walker. As to the other illustrations of that time, I am not sure that he ever even looked at their work. And we know, too, how thoroughly artistic judgment all over the World has reversed his opinions. But it is seldom that the opportunity has been afforded to compare a critic's estimate of work done thirty years ago with the work itself. And in this case it never will be afforded again.

At the Fine Art Society's, 148, New Bond Street, there have been hung a series of drawings and a number of water-colours by Arthur Boyd Houghton, J. W. North, G. J. Pinwell, and Fred Walker among others. These drawings in black and white were, in almost every case, made to illustrate the gift-books of the season, gift-books which followed the annuals and preceded the Christmas Number books which are all of them, with one exception, dead and forgotten; and even that exception can be bought for much less than its original price, if you can find it—Miss Jean Ingelow's "Poems." The other books in which most of the illustrations in question appeared, were "Wayside Posies"—note the name—edited by Mr. Robert Buchanan in 1867, and I think "The North Coast," by the same editor, 1868, and Novello's "National Nursery Rhymes," 1870. Despite Sir Walter Besant, people cared more about books in those days than they do now, and they were willing to pay more for them too. They treasured them up, and one can get these illustrated books at present only with very great difficulty. But it is most astonishing to find suddenly in an Exhibition the original drawings with which they were decorated. I say astonishing, because most Artists and Art lovers thought that these drawings were all made upon the wood block by the Artist and cut to pieces by the engraver. This was the method usually followed until well on into the seventies. But now it seems that they were preserved, I suppose, by photographing on to the wood block. A definite statement as to how and why they were thus preserved would be most interesting and valuable, and I trust that the Messrs. Dalziel, the engravers, will give it in your columns.

Still, the drawings are here, having been sent on, a number of them, from Birmingham, where they were shown by the Royal Society of Artists, and a very interesting catalogue of them is published. The man whom we now know was the greatest of that group, if we except Frederick Sandys, Ford Madox Brown, Millais and Rossetti, who came before him, was Arthur Boyd Houghton, and, though he was one of the most prolific of the group, I do not know of half a dozen of his original drawings in existence. Here there are, I believe, but three: a finished design for the Nursery Rhymes, "Tom, Tom, the Piper's Son," which contains all the imagination which the same Artist expressed in his "Arabian Nights" or "Don Quixote," all the sense of composition, of arrangement, of power, which was so

evident in his "Graphic America," all the technical accomplishment which you find in his "Home Thoughts" and "Home Scenes"; and if the beauty of some of the designs in that book are not so evident in this drawing, the same beauty is to be found in an exquisite pencil study which is here by him. His knowledge of the real life around him, too, is shown in a charming little street scene; and for the first time in years, and for the last time, I believe, outside the Print Rooms of the great Museums, one has the opportunity of studying his master's work. Fred Walker is represented in black and white by but a single sketch, I think, rather in the style of Sir John Gilbert. So also is J. Mahoney, who produced not only the earliest, but the finest set of Alpine drawings that have ever been done, to illustrate Mr. Whympers' "Scrambles amongst the Alps." But the marvels of the Collection are in the almost complete set of drawings by J. W. North and G. J. Pinwell. The latter, possibly, is the better represented man. Nearly the greater part of his work for Miss Ingelow's "Poems" is upon the walls. It is a pity though that the drawings for the "High Tide" are not here. But one can easily be content with the "Winstanley" designs. From the "Wayside Posies" we have the amazing study of reflections in "Shadow and Substance," the "Swallows," the "Journey's End," "Norland's Farm," "Doctor Tom," and "The Sailor's Love." One cannot praise these drawings too much, or too strongly advise the younger illustrators to hunt up the books in which they appeared. But excellent in a certain way, and for their time, as were the engravings made from them, they give no idea whatever of the exquisite originals, which, as I have said, may now be seen for the last time before they disappear into the portfolios of collectors. Here is the work of the men who gave the *Graphic* at its start its World-wide pre-eminence, which gave the *Cornhill*, *Once a Week*, and *Good Words* an artistic standing which no English illustrated journal has ever approached since. Here are unique examples of a British Art, every one of which should be upon the walls of the National Gallery. Certainly, during the last five or six years no such show has been held in London, and no such opportunity has been offered to artists and collectors. But illustration has not yet, like cycling, become the fashion. When the dealers have got rid of Bartolozzi's prints they may turn their attention—I hope it will be some years yet—to original Art in black and white. The work of this group of men was thoroughly and distinctly healthy, accomplished, distinguished, and English.

THE Leeds School Board has decided, subject to the approval of the Education Department, to purchase a plot of land owned by Messrs. Walmsley, containing about 7,000 square yards, and having a frontage to Norwood Grove and two intended new streets, as the site for the proposed School in the Brudenell Road district, the price provisionally agreed upon being 13s. per yard.

THE spacious open-air Bath which the Liverpool Corporation has provided in Burlington Street, has been formally opened. Situated in one of the poorest and most densely-populated parts of the city, this Bath, which will be free, should prove nothing short of a blessing to the poor urchins who positively swarm in the purlieus of Vauxhall Road and neighbourhood. The Bath holds 85,000 gallons of water, and varies in depth from 2 ft. 6 in. to 3 ft. 8 in.

AFTER all, the gold-finding experiments in Sutherlandshire are likely to turn out better than has been anticipated during the past few weeks. Within the last week the number of miners on the ground has increased, and some of them are said to be doing fairly well, which, under the severe restrictions imposed by the County Council, is as well as could be expected. The experiment has just over another month to run.

ARRANGEMENTS are being set on foot for an immediate extension of the railway from Mafeking to Buluwayo. The estimated cost is one and a half millions sterling.

THE Subscribers to the Frank Holl Memorial have been notified that it has now been placed in St. Paul's Cathedral.

THE ARRANGEMENTS OF SHRINES.

THE Shrine of Edward the Confessor, which still remains in Westminster Abbey, will serve to illustrate the arrangement of Becket's Shrine, and probably those of the other principal saints. It stands, like Becket's, in a Chapel, and separated from the Choir and High Altar by a Reredos, but yet not a detached building as the Lady Chapels so often were. Architecturally speaking, the Chapels of Edward and Becket are within the Choir at its east end; the pavement in both cases is raised above the level of the Choir, and each Shrine is a parallelogram on the plan, and stands east and west. The Altar is at its west end, and in contact with it, so that the Saint is placed behind the Altar, *retro altare*; and, reciprocally, the Altar is at "the head of the saint," since the head of a corpse was always laid to the west. These phases had been noted by the monkish chroniclers; for example, in the Saxon Cathedral the matutinal Altar was placed at the head of Dunstan, and Anslem, Odo, Wilfrid, and others were deposited behind Altars. On the other hand, in Chantry Chapels the tomb of the uncanonised founder is commonly at the west of the Altar, so that the priest stands at the foot of the tomb. The description of the Shrine of St. Cuthbert at Durham will also serve to illustrate the two already mentioned. This, too, was placed behind the great Reredos of the High Altar upon a raised platform enclosed, and forming what was called a "Feretory" or Chapel for the reception of feretrum. This platform may still be seen extending partly into the great Eastern Transept or "Nine Altars" as it is called. In the midst of it "his sacred Shrine was exalted with most curious workmanship of fine and costly marble, all lined and gilt with gold, having four seats or places convenient underneath the Shrine for the pilgrims or lame men setting on their knees to lean and rest on, in the time of their devout offerings and fervent prayers to God, and holy St. Cuthbert, for his miraculous relief and succour." (Under the Shrine of Edward the Confessor, there are arches, three on each side, which probably served for a similar purpose). "At the west end of the Shrine of St. Cuthbert was a little Altar adjoined to it, for mass to be said only on the great and holy feast of St. Cuthbert's Day in Lent . . . and at this feast, and certain other festival days, in time of divine service, they were accustomed to draw up the cover of St. Cuthbert's Shrine, being of wainscot . . . and a strong rope was fastened thereto, and did run up and down in a pulley under the Vault for the drawing up of the cover; fine sounding silver bells were fastened to the said rope, which at the drawing up of the cover made such a goodly sound that it stirred all the people's hearts within the Church." This cover was painted and varnished within and without, and within the Feretory, on both north and south sides, there were ambries of fine wainscot for relics.

THE Conseil D'Administration de la Dette Publique Ottomane has placed a large order with the N. A. P. Window Co., for fitting the whole of their new block of offices, which are being erected at Constantinople, with its patent Window Sashes. We believe this is the first time sliding sashes have been introduced into Turkey, casements having been hitherto invariably used.

THE paper cables used in insulating electric wires in Chicago are made by wrapping strips of manilla paper around the wire and coating it with resin and resin oil. When sheathed in lead pipe these cables are said to be highly satisfactory.

THE Municipality of Geneva now claims that it has the largest Fountain in the World. This Fountain has been erected at the port's entrance of that city. It is no less than 300 feet in height, and may be seen from a great distance, detaching itself like a great white sail flapping through the effect of the wind.

THE Persian Government has requested the Russian Government to send Engineers to make preliminary surveys for a Railway to connect Teheran and Tabriz with the Trans-Caucasian system.

THE WEAKNESS OF NORMAN TOWERS.

DAINGEROUS CONDITION OF SHOREHAM'S FAMOUS CHURCH.

SHOREHAM Church, a Church which has been described as having no equal for size, dignity and grandeur, between Winchelsea and Chichester, is threatened with disaster. We refer, of course, to the Parish Church at New Shoreham. In consequence of certain internal dilapidations, the Rev. Charles M. A. Tower, after consultation decided to obtain the best advice possible as to the condition of the Tower. Mr. B. Ingelow, of Messrs. Slater, Carpenter & Ingelow, Architects, inspected the Tower towards the end of last month and again on a later occasion with Mr. Thompson, the eminent builder, who is at present engaged at Peterborough Cathedral. Sir Arthur Blomfield was also asked to pay Shoreham a visit and inspect the Tower. The condition of the Tower is so serious, we append Sir Arthur's report together with Mr. Thompson's letter:—

"I found the whole of the north-east angle containing the turret stair," writes Sir Arthur, "in a most dilapidated and unsatisfactory condition, caused by long-continued neglect in dealing effectually with palpable indications of weakness and crushing which must first have begun to show themselves at a very early date in the history of the building. Most of the cracks and fractures (which are both frequent and serious) appear to be of long standing, and the progress of the mischief has, no doubt, until lately been as slow as it has been sure. But in cases like this a period must sooner or later arrive when inaction is no longer possible without imminent risk to the building. I have no hesitation in saying decidedly that such a point has been reached in New Shoreham Church. The sixth respond of the arch between the North Transept and the north Choir Aisle is in a distinctly dangerous condition, and no time should be lost in making it temporarily secure with strong centreing, shores and strutting carefully arranged so as to permit a thorough examination with a view to dealing with this angle as may be found necessary to make it permanently safe. This, I anticipate, can only be effected by rebuilding in a sound and substantial manner. When this has been carried out the Tower will probably be much safer than it has been for many years past; but the progress of dilapidation already far advanced will still be going on in the upper part, and neither this corner nor the Tower generally can be considered at all in a sound state before the work of substantial repair is carried up the staircase and through the whole of the interior of the upper stages of the fabric. Until this is done the bells cannot be rung with safety; at present they are not in a fit state to be rung under any circumstances. If the weak angle and walls generally are carefully and skilfully treated, not only may the bells be put in order and rung, but I think it will be found that the present unsightly brick cemented buttress may be removed. In conclusion, pray allow me to express my strong opinion as to the very great importance of entrusting the difficult and delicate operation of examining, and if necessary rebuilding the failing angle to a builder well accustomed to work of this kind, and who may be trusted to deal with Mediaeval Architecture in a properly conservative spirit."

"In accordance with your request, I have carefully examined the Tower of Shoreham Church," says Mr. Thompson. "There are many indications of weakness and great pressure, and also that an active movement is going on injurious to the stability of the Tower, but the more serious of which are to be traced in the north-east angle of the Tower, and in the walls above the Bell Chamber. The most serious mischief is, however, from the crushing movement in the weaker angle—the north-east—in which the stone steps leading from the ground floor to the floor of the Bell Chamber are built, and here the mischief is great, and is extending downwards to the responsible pier, &c., or the eastern face of the north-east angle, and which I consider to be in a dangerous condition. The Tower seems at an early date, from some cause—probably insufficient foundation (although this can only be ascertained by examination)—to have gone over a little to the

east, and, more recently, to have pressed heavily upon the north-east angle, accelerating the mischief above mentioned. It is quite evident that some immediate measures must be taken to prevent more serious and irreparable damage to the beautiful and interesting work of the Church. The first and essentially necessary course is to carefully strut and shore with timber, and put strong centreings to the arches of the Tower and the openings immediately in connection with the same, which will enable examination of the foundations to be made, &c., and give time to determine the amount of repairs of the works most needful."

We are glad to note that prompt steps are being taken in the matter. At a meeting held on Thursday last, the Rev. Charles Tower announced that arrangements had been made to enable the work to be taken in hand at once. Many people were not fully alive to the danger of these old Norman Towers. The building of the Normans was not to be compared with that of the Romans. The building of the Normans consisted of a very fair facing, but there was a very weak filling up in the centre of the thick walls. The Bishop of Chichester, who approved warmly of the plan, had sent him a list of Towers that had fallen—Towers, which five minutes before they fell, looked, he had no doubt, as strong, firm, and solid as theirs. The Towers mentioned were at Winchester, Gloucester, Worcester, Evesham, Dunstable, Lincoln, Ely, Norwich, Selby, Hereford, and Chichester. That showed them that they could not ignore the opinion of those eminent Architects who had warned them that something must be done to render their own Tower more secure.

EARLY "SCOTTISH MANNER" IN CHURCH BUILDING.

WHEN Bede describes the building of the Cathedral of Lindisfarne by St. Finan, in the year 652, he tells us that "it was constructed not of stone, but of oaken planks, thatched with reeds, after the Scottish manner." This "mos Scotorum" was carried by their missionaries even beyond the Alps; and in his wooden Oratory at Bobbio, among the wild hills near the source of the Trebbia, St. Columbanus, early in the seventh century, reproduced in Classic Italy the rude type of Irish Banchor and Scottish Iona. St. Bernard relates that so late as the twelfth century St. Malachy built a wooden Shrine in Ulster, "opus Scoticum, pulchrum satis;" and that when afterwards he began to raise a stone edifice, such as he had seen abroad, the Irish exclaimed against it as a piece of Norman extravagance—a vain and useless innovation. The Monastery which St. Columba founded in Iona in the middle of the sixth century, is called by an old writer "gloriosum canobium." That it was so, in one sense, no person will question who traces on the map how large was the region of England which its Scottish missionaries and their Saxon disciples built up in the Christian faith. But its glory was not material. The only passage in Cumin or Adamnan from which we can infer anything as to the buildings on "that illustrious island which was once the luminary of the Caledonian regions," speaks of the apostle of the Scots as sending forth his monks to gather "bundles of twigs to build their hospice." The mainland abode of St. Waloe, a bishop of the same age, is described in the Breviary as a mere wattle-hut—"pauperulam casam calamis viminibusque contextam." The greater dignity of the Churches seems to have been in their construction, not of basket work, but of squared timber; they were log houses, not wigwams. Thus, in accordance with what Bede writes of Lindisfarne, the Breviary relates that the Church of St. Maolrubha, at Urquhart, on the western bank of Loch Ness, was built of "hewn oak;" and of the same fashion doubtless was the more famous Church which he founded at Applecross, in the western wilds of Ross, in the year 673, and which a century later gave an abbot to the great house of Banchor. Built, as the primitive Churches were, of such perishable materials, it is not to be wondered at that so many "venerable seats of ancient sanctity" in Scotland should now offer little to the eye of the pilgrim.

SAWDUST.

THE 40-inch lens for the great Yerkes telescope has been tested by Alvan Clark, the American maker, on the star Arcturus, the planet Saturn, and some double stars, and found satisfactory. Mr. Clark is also constructing a binocular telescope like a huge opera glass for Mr. Edgecombe, of Newington, Connecticut, U.S. The twin telescopes are 6½ inches in aperture, and lie side by side.

SOME weeks ago the Buxton Council asked the Duke of Devonshire for a piece of land suitable for a recreation ground, and his Grace, through Mr. F. Drewry, his agent, has intimated his willingness to give six acres, situate off London Road. The site is central, and its value can scarcely be estimated.

A NEW Maritime Canal, only 600 feet long, but 400 feet wide, and 14 feet deep, connects Great Salt Pond on Block Island—that is to say, one of the finest land-locked Harbours on the Atlantic coast of America—with the ocean. These great and important works come so fast upon us that we scarcely heed them. Yet did not our grandfathers and great grandfathers accomplish things quite as big relatively? There are seven miles of tunnelled galleries hewn in the rock of Gibraltar.

THE excavations at Pimsgad, the Algerian Pompeii, have been resumed under the direction of Mr. Albert Ballu, Architect to the Historic Monuments Commission.

A DISPENSARY and Medical Officer's Residence are to be erected at Coolgreany, County Wexford.

A NEW National School is to be built at Cornanool, within two miles of Castlebar.

A "BALLASTIC" Plate for a man-o'-war's turret has been despatched from Bethlehem, Pennsylvania, to Russia, where it will be tested by the Russian Government, with a view to a contract being concluded for a supply of a quantity of ship's armour.

ARAB papers announce that at the little town of Urfah, north of Aleppo, the ruins of an old Temple have been discovered, of which it is believed that it existed in the time of the Chaldeans. Urfah, which the Romans called Castellum Ur, is the "Ur of the Chaldees" of the Bible, the birthplace of Abraham, and a house, declared to be that of the patriarch, is still shewn there. If the ruins of this Temple are really Chaldean, they may possibly lead to important discoveries.

VISITORS to the British Museum will be pleased to note the great improvements which have been made in the Mummy Room by the erection of three Skylights in place of the old side windows, which, at their best, only threw the light on to the cases nearest the windows. These Skylights are very large, and show up the smallest objects in the room, which may have hitherto remained unnoticed.

THE Sanitary Institute, which had so successful a congress last year at Liverpool, will not hold any congress this year. The Institute has been devoting itself to practical work during the winter, and we scarcely think it is in a position to devote its energies to another congress for the present. The Institute, however, is doing most useful work.

THE Dublin Corporation has decided to appoint a fully qualified Assistant in the City Architect's Office, such appointment to be an annual one.

THE Duke of Cambridge will lay the Foundation Stone of the new Secondary School and Technical Institute at Richmond to-morrow.

THE Loughborough Board of Guardians purposes carrying out alterations at the Workhouse at a cost of £738.

THE Earl of Crawford has presented a small Collection of Antiquities to the British Museum, consisting of a series of objects of hematite found in Egypt. Among these may be noticed a few very fine Babylonian cylinders and Egyptian scarabs. All these objects are on exhibition in the third Egyptian Room.

AN Hungarian Architect and Antiquarian, M. Adrian Diaconu, claims to have found in the ruins of the ancient Roman camp of Bersovia, at Bogsan, near Temesvar, unmistakable evidence that the Romans, and, in particular, the officers of the Fourth Legion (Flavia Felix), understood, as early as the second century, the Art of Printing, and made use of movable types while encamped at Bersovia.

Professional Items.

ABERDARE.—The tender of Mr. R. C. Brebner, of Edinburgh, at £20,737, for the new Waterworks, has been recommended for acceptance by the Waterworks Committee of the Aberdare District Council.

ALDEBURGH.—A proposal is before the Council for the erection of an iron Bridge for vehicular traffic over Thorpe Haven. The cost is estimated at £500.

BOURNEMOUTH.—Plans prepared by the Borough Surveyor, Mr. F. W. Lacey, have been adopted by the Bournemouth Town Council, for a Fire Brigade Station at the East Yard, and Mr. Lacey is also to prepare plans for the Chapels and other buildings at the Cemetery. For the latter work the Surveyor will be paid an honorarium of 120 guineas, out of which he is to pay for any outside assistance required in the preparation of the designs.

BRIGHTON.—The Town Council invites tenders for the erection of a Residence for the Superintendent of the Public Abattoir, and also for the extension of the Colonnade and Terrace, Madeira Road. Tenders should be sent to the Town Clerk by Friday, July 26th.

CAMBORNE.—On Wednesday the foundation stone of the New National Schools was laid. The Architect for the new building is Mr. Sampson Hill, of Redruth, and the contractors are Messrs. Moyle and Michell. It is hoped that the new Schools will be completed on or before Whitsuntide next year.

CHICHESTER.—The tender of Mr. C. Hooker, of £855, has been recommended for acceptance by the Finance Committee of the City Council for the building of the Manager's House and two cottages at the Outfall Works. The Local Government Board has sanctioned the borrowing of £7,000 for works of sewage and sewage disposal.

COMPTON GIFFORD.—The laying of the memorial stone of the Tower of Emmanuel Church, Compton Gifford on Thursday last, marked the commencement of the completion of the edifice. The present contract for the Tower only represents about £3,500, whilst the proposed Spire will cost another £1,600. Mr. Bone is the Architect, and Mr. Jonathan Marshall, builder.

COVENTRY.—The new engines, boiler, buildings, &c., for the Kenilworth Water Company, are now completed, and are capable of supplying 100,000 gallons of water per day. The whole of the work has been carried out by Diggins and Strong, Coventry, from plans by E. J. Purnell, jun., Coventry.

DUMFRIES.—At a meeting of Dumfries School Board, on Tuesday last, it was resolved to proceed with the erection of the new Academy, according to the plans prepared by Mr. F. Carruthers. The following estimates were accepted:—Mason—Messrs. Houston and Robson, Dumfries, £6,226 5s. 8d.; Joiner—Mr. McLauchlan, Dumfries, £3,165 7s. 7d.; Plasterer—£651 3s. 8d.; Slater—Mr. Milligan Annan, £246 7s. 8d.; Plumber—Messrs. Drummond, Dumfries, £686 19s. 10½d.; Painter, Mr. Haining, Dumfries, £416 14s. 10d.; Tile—Messrs. Keand and Wardrop, Glasgow, £335 12s. 6d. The cost will be about £13,575.

GILFACH-GOCH.—A new Hotel was started at Gilfach-goch last week. It is to be built with local stone, with Ruabon brick and Bath stone dressings. Messrs. Griffiths & Jones, Pontypridd and Tonypany, are the Architects, and Mr. Elias Thomas, Tonyrefail, and the Llantrissant Steam Joinery Company are the Contractors.

GLASGOW.—The time for lodging tenders for the mason, brick, iron, carpenter, joiner, glazier, slater, plumber, plaster, and iron work required in the completion of the Art Galleries being erected in Kelvingrove Park by the Association, for the Promotion of Art and Music in Glasgow expired on Thursday last. The tenders were

received by Mr. Allen F. Baird, the hon. secretary of the Association, and the Building Committee will meet in the course of a few days to consider the various offers.

ILFRACOMBE.—Plans for ten Villas on the Chambercombe Park Estate, Ilfracombe, have been prepared by Mr. H. W. Weir, Architect, of Ilfracombe, for Mr. H. Braund. So great is the demand for houses on this Estate that, in many cases, the agreement for tenancy is signed before the foundations are in, the houses being taken from the plans.

ILFRACOMBE.—The alterations and general restoration of Christ Church, Ilfracombe, is just completed. The Church, which is Romanesque in design, has had a new timber ceiling, windows, fresh seating, &c. The whole of the restoration has been carried out according to plans and specification, and under the superintendence of Mr. H. W. Weir, Architect, Ilfracombe.

KINGSBURY.—The Kingsbury School Board proposes to build a new Main School and one extra Class Room at Hurley (this being one of the three Schools under its control). The old building has been condemned by Her Majesty's inspectors. Messrs. T. W. F. Newton and Cheater, of Birmingham and Tamworth, have already made plans which have been approved by the Board and also by the Education Department, and tenders were to be in by the 19th. The style is a free rendering of the Georgian period, with red brick stone dressings, and red tiles, and the new accommodation will provide for about 200 children, exclusive of a present Class Room, which will still be used, with accommodation for 75 infants. The Clerk to the Board is Mr. H. S. Martin.

LANCHESTER.—The Guardians, at their fortnightly meeting on Thursday, decided to build a new Infirmary at a cost of £5,000, and to borrow the money required for a period of 25 years.

LISCARD.—A new Church is being erected on the site of the original iron building in Martin's Lane, Liscard, and known as Christ Church. The building, when completed, will cost about £3,000. The new Church will accommodate 500 persons, the contractors for the works being Messrs. W. H. Bleakley and Co., Birkenhead; while Mr. T. Barry, of Liverpool, is the Architect.

LIVERPOOL.—From the designs of the water Engineer, new buildings have been erected by Mr. E. Gabbutt, Contractor, Liverpool, to be used as Corporation Workshops. They are bounded on the south-west by Pall Mall, on the north by Leeds Street, and on the north-east by Highfield Street, and have a frontage to Pall Mall of about 100 yards. Generally the buildings are of grey and red pressed bricks with terra cotta dressings. The principal entrance, which faces the Lancashire and Yorkshire Railway Line, is under a bold stone Archway, and protected by ornamental iron gates, surmounted with a liver. The two-storied block to the north of the Entrance Gate includes the Storekeeper's Rooms, where are kept all the miscellaneous stores and articles required in a large system of waterworks. At the side of the archway near to the Entrance Gate, there is a Watchman and Timekeeper's Room, and adjoining this are the Meter Office and Superintendent's Office. On the upper floor there is also provided a Standard Sample Room. To the left of the depot for stores, and with a separate entrance are the Stables, Coach-house and Harness-room, and above these a Residence for an assistant storekeeper. To the right of the main entrance is the office for testing water fittings. The principal room is 57ft. long and 37ft. wide, and has a separate entrance from Pall Mall. At the rear of the block facing Pall Mall, the Workshops are situated. These consist of a Mechanic and Fitters' Shop 6ft. by 33ft., Machine Shop 45ft. by 33ft., a Smithy, and a Shop for testing water meters, also a Joiner and Pattern-maker's Shop. The Workshops and Offices are heated by a hot water system erected by Messrs. Killick & Cochran, Liverpool.

LONDON.—On Tuesday afternoon Princess Louise performed the ceremony of laying the Foundation Stone of a new Technical Institute in Lancaster Road, North Kensington. The new building will adjoin the Free Library of the parish, and the site alone has cost £2,526. Towards the sum required for the building and furniture the Campden Trustees have given £5,000. When the Institute is completed, classes in wood work, wood carving, drawing, &c., which at present meet at different places in the district, will find a home in the Institute. The drawings show a handsome building of red brick with stone dressings. There will be two floors, the lower one for boys and the upper for girls. The building is being erected by Messrs. Holloway from plans drawn by Mr. Roland Plumble, F.R.I.B.A.

LINCOLN.—The new Font lately presented to St. Nicholas Church, Lincoln, has been designed by Mr. Loftus Brock, and is in the thirteenth century style, with octagonal bowl, which is richly carved, and supported by four Doric marble columns. The carving has been executed by Messrs. M. Tuttell & Son, Sculptors, Lincoln.

MILLBROOK.—For the new Board Schools in course of erection, at a cost of £10,000, Mr. A. F. Gutteridge, of Southampton, is the Architect, Mr. A. F. Cawte, of the same town, the Contractor, and the fittings are being supplied by Messrs. Illingworth, Ingham and Co.

NEWLYN.—Mr. Gregory Jones's Fresco over the Chancel Arch of the "Church of the Painters" at Newlyn, has been so generally approved that he has been commissioned by the Rev. R. Peel Yates to decorate the walls of the Church in a similar manner. His success is the more creditable as it might well be imagined that the criticism of an Artistic Colony would be more than usually exacting.

NEWMILUS.—Mr. Wm. Morton, of Birmingham, is about to erect a Hall in memory of his brother, and plans for same are in course of preparation by Mr. Arthur Harrison, of Colmore Row, Birmingham. The Hall will be erected at Newmilus.

NOTTINGHAM.—To-day the foundation stone of the new permanent Church of St. Catherine, Nottingham, is to be laid by the Duke of Newcastle, the Lord Bishop of Derby having consented to conduct the service. The new Church is being built to the plans of Mr. R. Clarke, Architect, of Nottingham, and will be a handsome edifice of Bulwell stone, in the Early Decorated style.

PADDINGTON.—The Church of All Saints, Norfolk Square, Paddington, which was burnt down in June of last year, has been rebuilt from designs by Mr. Ralph Nevill, of Chancery Lane, and will be consecrated by the Bishop of London on All Saints' Day.

PENZANCE.—A new Organ has recently been erected in Sennen Church, Penzance. The Organ is a two-manual one, built by Messrs. Gray & Davison, London; and rebuilt and enlarged by Messrs. Pearse & Co., London.

PENZANCE.—For the new Sea Wall on the Western Promenade, the tender of Mr. Arthur Carkeek, Redruth, was accepted by the Town Council at a meeting held on the 15th inst., at the sum of £9,866. The Surveyor's estimate was £10,830, including costs of the enquiry and railings. The following tenders were sent in:—John Shaddock, Plymouth, £13,500; Shillabeer, Plymouth, £10,200; Messrs. J. C. & T. A. Lang, Liskeard, £10,600; W. H. Stevens, Penzance, £11,075. A Clerk of the Works is to be advertised for.

RHONDDA VALLEY.—A new Unitarian Chapel has been commenced at Clydach Vale, Rhondda Valley. It is to be faced with local stone, with Cattybrook red brick dressings. The plans were prepared by Messrs. Griffiths & Jones, Architects, of Pontypridd and Tonypany, and the work is being carried out under their superintendence.

ROTHERHAM.—The religious denomination known as "Spiritualists" has opened a place of worship at Parkgate. The "Temple," as it is called, is situate in Ashwood Road, and its seating accommodation is for 250 persons. The total cost is put down at £500.

ROTHESAY.—At a meeting of the Bute County Council, Mr. William Dunlop Brown, Glasgow, was appointed Sanitary Inspector for the County, and District Sanitary Inspector for Bute and Cumbrae.

SALISBURY.—The reported unsafety of Salisbury Cathedral Spire has caused widespread consternation among Antiquarians, Architects, and Churchmen. Sir Arthur Blomfield was immediately taken into council, and, after a careful examination, reported to the Dean and Chapter that, though no immediate danger was to be apprehended, serious mischief had occurred and must be remedied without delay. His report will be published, and no time is to be lost in appealing for funds to obviate all possibility of a catastrophe.

SHEFFIELD.—The Sheffield School of Art has again been awarded a gold medal, also a silver medal and six bronze medals, in the National Competition. The gold medal is taken by J. R. Duffield, for historic studies in Design on articles in the precious metals. The silver medal is gained by Percy John Roberts, for Modelled Design as applied to the baser metals.

SWANSEA.—A Hall, to seat about 500 persons, and extensive Club premises are being erected at Curnburla, Swansea, in connection with the Friendly Societies of the district, the Architects being Messrs. Wilson & Moxham, of Swansea.

TIVERTON.—The Joint Isolation Hospital Committee of the Tiverton Town Council and the Rural District Council have adopted a scheme formulated by Mr. J. Siddalls, C.E., Borough Surveyor, and have selected a site about three acres in extent, two miles from the town, upon which boring operations have just been carried out under the direction of the Architect, for the purpose of ascertaining the presence of water on the site. The bore has been sunk by Messrs. Shepherd & Sons, of Exeter, to a depth of 150 ft. and a depth of 50 ft. of water has been found. Continuous pumping for 48 hours for the purpose of testing the capacity of the borehole has been carried on, without lowering the water-level. The scheme is now to be pushed forward at once.

WARWICK.—The Local Government Board has given its consent to the raising of a loan of £1,556, for the cost of works at the Police Courts and Barracks at Aston; and has also consented to the raising of a loan of £1,336 for the erection of a new Police Station at Erdington.

WHITBY.—On Wednesday last was consecrated the new Church of St. Mary, at Goathland, near Whitby. The Church has been built in place of the old one, which had become dilapidated and too small for the requirements of the district. The new Church is a handsome structure, and is built in the Late Decorative style, treated in a simple and broad manner. The total cost is about £2,000.

WOKING.—Messrs. Taylor, Sons & Santo Crimp, of Westminster, have been commissioned by the Woking Urban District Council to design a scheme which is to include the drainage of all except the most rural parts of the district.

The South Hetton Coal Company, Limited, has through its agent, Mr. W. O. Wood, expressed their intention of erecting a new Miners' Institute at South Hetton, in place of the present inconvenient room used for the purpose, and which has long been too small for the largely increased requirements. The offer of the new building, which is to cost over £1,000, was accompanied by one condition: that the miners should provide the necessary money to furnish the interior.

OUR BOOKSHELF.

"The Reliquary and Illustrated Archæologist." A Quarterly Review.

Messrs. Bemrose and Sons, of 23, Old Bailey, send us the July issue of this Review, published at half-a-crown. The work is extremely well printed, and we appreciate good printing, for it is one of the finest of the mechanical Arts. The number, which is the third published—the two previous issues we should much like to possess—deals with the Roman Thermæ of Fiesole, of which discovery very little information, up to the present, has been published. It appears that the first fragments came to view in a field beyond the Theatre, where, in 1892, some workmen were repairing the Etruscan wall, which had given way. They found two ancient brick furnaces, with some bits of Roman stone wall, and some interesting fragments, such as a base of white marble, trapezoidal in form, on which were the remains of a statue of Hercules. The feet were intact, the lion and cub lay in fragments near it. There was also found a very large sheet of lead, weighing 560 kilos (about 1,236 lbs. avoirdupois) with a pipe in it, evidently part of the lining of a large cistern. Near this was a metal bucket with two movable handles, and the earth was full of fragments of all kinds of antique marbles. Several excellent photographs of the remains illustrate Mr. Leader Scott's article.

"The Anatomy of Pattern." By Lewis F. Day. (London: Batsford, 94, High Holborn.)

This is the fourth edition of a very excellent text-book, and Mr. Day strikes the correct note when he assumes no particular knowledge on the part of the student, but only that he is a student, who wants to know something, and that what he wants to know is "what I would have liked someone to tell me when I was a beginner." There is an enormous amount of information on the technicalities of Design in the book, and after a very careful study of it, it seems remarkably easy to produce something startlingly beautiful. But Mr. Day does not tell us everything—the facility of producing well balanced design, appropriateness of pattern—although upon this head he devotes a whole chapter—and many other virtues of good work which are something more than mere trickery of the pencil. These things are actually inexplicable, and it is well that they should be, or the World would be flooded more than it already is, by design of a very low quality. Some of the "patterns" shown in this work, are designs of the very highest merit, and it has often passed our understanding why Mr. Day allows so much of his charming work to be produced in colours which, to our mind, are fearful to look upon. "The Anatomy of Pattern" is the perfection of a text book. It is concisely, distinctly, and definitely written; and although it has no appearance of being a pretentious work, its 55 pages are full of sterling information which no real student should fail to possess.

"Year Book of the Scientific and Learned Societies of Great Britain and Ireland." Twelfth Annual Issue. (London: Charles Griffin & Company, Exeter Street, Strand.)

The work is a mass of information relating to all the Societies engaged in fourteen departments of Research, with the lists of the papers read during the past year, and the names of their Authors. It is one of the most useful of the Year Books published.

"Bungalows and Country Residences." A Series of Designs and Examples of Recently Executed Works. By R. A. Briggs, Architect. (London: B. T. Batsford, 94, High Holborn, W.C.)

The third edition of a collection of views and plans of Country Houses, designed by Mr. R. A. Briggs, with a description of the plates and an estimated cost of each design. Mr. Briggs eschews style and all attempt at individualism. He does not fetter his work with any limitable intentions, and so he gives us a conglomeration of designs which, taken singly, are in many instances striking, and in some instances really good, as for instance, the Bungalow design shewn in plate XI., which is, distinctly simple. Mr.

Briggs' executed work is far above much that is shewn in this collection of sketches. Mr. Briggs, in his preface, thanks his friends and clients who contributed to the success of his previous editions—"a success which is rarely reached in the publication of Architectural works." We will but hope that if another edition of this "Architectural Work" be ever called for, its Author will allow us to compile it, under the guarantee to produce illustrations of his own executed work far in advance of much that appears in the present book.

SOCIETY MEETINGS.

Northern Architectural Association.—The annual excursion took place on Saturday. Members assembled at the Central Station, Newcastle, and travelled to Chollerford, where the new buildings at Chesters, carried out for Mr. Clayton, were visited. The remains of the Roman Station of Cilurnam in the Park, at Chesters, were inspected, and explained by Mr. Robert Blair.

Sheffield Society of Architects and Surveyors.—In presenting the eighth annual report the Council congratulates the members on the satisfactory condition of the Society. Financially, a considerable portion of the subscriptions which were in arrear at the commencement of the year has been collected, and the balance in hand very materially improved; and numerically there has been an accession of members and an increased attendance. At the request of the last annual meeting, the careful consideration of the Council has been given to the question of renting a room for the Society's operations, but the subject was postponed on the report of the treasurer, that he had closely looked into the accounts and found that the margin between the income and the expenditure was not sufficient to warrant the undertaking. As the prizes presented by the Society are usually in books, it was thought advisable to have an inscription plate for the books, and the Treasurer, Mr. F. Fowler, F.S.I., offered a prize of a guinea for the best design, and Mr. R. W. Fowler, F.S.I., offered a second prize of half-a-guinea. Several designs were submitted, and the first and second prizes were awarded by the Council respectively to Mr. F. Wilson (student) and Mr. L. D. Hemsol, (student); the former design is now being engraved. The lecture list for next winter is in a promising state, Dr. H. C. Sorby, F.R.S., Mr. Paul Waterhouse, M.A., F.R.I.B.A., Mr. Hugh Stannus, F.R.I.B.A., Mr. Percy Fitzgerald, M.A., F.S.A., and Mr. T. Winder, Assoc.M.Inst.C.E., are expected to render useful service; and the Sketching Classes and a Surveying Class for the summer, and the History Class and the Class of Design for the winter, will make up an acceptable programme for the year.

Royal Archæological Institute of Great Britain and Ireland.—The annual meetings of the Royal Archæological Institute of Great Britain and Ireland were held at Scarborough last week under the presidency of Viscount Dillon. The Archbishop of York read a paper dealing with "The Advantages Accruing from a Study of the Science," and St. Mary's Parish Church (confirmed to the Cistercians in the year 1238) and the Castle (1236—Norman keep and later works) was inspected, amongst other places of interest.

At a recent meeting the Crediton Rural District Council accepted the tender of Mr. W. Berry, for repairing Diddy Mill Bridge at £33. Several places were reported as unsanitary at Bow, and notices were ordered to be issued. The Surveyor reported the footpaths at Sandford to be in a bad state, and inquiries are to be made as to who is liable for their repair. Several Bridges reported by the Surveyor as being considerably washed were ordered to be repaired.

The result of the appeal that has been made to the City companies, and the merchants and bankers of the City to combine in subscribing towards the purchase of the celebrated Holbein picture, at Barbers' Hall, has proved very disappointing. Less than £1,000 has been subscribed, which is a ridiculous sum, seeing that £15,000 is asked for.

The Builders' Journal COMPETITIONS.

No. 5.—A Cottage Hospital.

Designs are required for a Cottage Hospital on a Corner Site in a County Town. Provision must be made for twelve beds (six women and six men), with Matron's and Superintendent's Apartments, Convalescent Room, and all necessary domestic and sanitary accommodation. A sum of three thousand pounds may be expended on the building and terrace. Designs to reach the Editor not later than Monday, August 26th, 1895.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eightpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

THE American excavations in Crete have been so far crowned with success. They have led to the discovery of a large Byzantine Church, the stones of which have been taken from much older buildings, some of them bearing Archaic inscriptions. Amongst them is the text of a treaty between the towns of Gortyna and Rhizema. There is also an agreement in Archaic dialect relating to the building of houses and the planting of trees, and a decree relative to the importation of bronze coins into Gortyna. There is also a rich find of inscriptions of later times, Macedonian and Roman.

"DOLCOATH," one of the greatest tin mines in the World, is about to change ownership. Until recently, it was worked on the "costbook" method, but is now to become a limited company. It has, in times of high price, been known to pay over one hundred per cent. in a year; and it is one of the oldest of the existing mines in Cornwall.

COUNCILLOR E. PARKES, M.P., will lay the Foundation Stone of the new Meat Market and Slaughterhouses, in Bradford Street, Birmingham, tomorrow.

SAWDUST.

THE premises of the General Electric Company, Limited, in Chapel Street, Salford, have been completely destroyed by fire. The damage is estimated at about £30,000.

THE fine Observatory at Montrouge, Paris, is to be pulled down and a similar building reconstructed outside the fortifications at Meudon, the large space of ground occupied by the existing building being wanted for the prolongation of the Boulevard St. Michel.

THE Foundation Stone of the new Free and Parochial Schools attached to the Parish of St. John-at-Hackney, which were founded in 1714, and which, owing to the demands of the Education Department, it has recently been found necessary to extend, at an estimated cost of £7,700, was laid by Princess Henry of Battenberg on Tuesday last.

AN effort is being made to reinstate the famous Church Bells of Ashbourne to their former high condition. It was with respect to Ashbourne Church that Tom Moore's well-known poem, "Those Evening Bells," was written. A sum of about £400 will be required.

THE picturesque island of Eigg, Inverness-shire, at one time the property of Professor Norman Macpherson, has been purchased by Lieutenant A. Robertson-Stark.

DURING a severe storm which passed over Sandusky, Ohio, the other day, a number of very large trees were blown over, among them one that has quite a history. It was a sycamore, and regarded, not only as one of the largest this side of the Mississippi river, but it is noted for the reason that the Indians hollowed it out, and constructed inside an apartment large enough for two dozen people.

THE Haslingden Town Council has adopted plans and estimates for a new Fire Station, to cost £1,700.

THE rebuilding of Mar Lodge will cost the Duke of Fife a considerable sum over and above the insurance money he has received. The old house was not fully insured, the policy on the building being, we understand, for £12,000 only. The new Mar Lodge will be an important structure of brick and stone. The plans have already been drawn out and approved, and building operations will begin at once. It is possible that the Queen may lay the Foundation Stone during her autumn residence in the Highlands. She has had a hand in completing the design, and it was at her suggestion that a fresh site has been chosen. The old home commanded a fine view, but the outlook from the new one will be superior.

IT is proposed by the Methodist Free Churches to build and endow a College. Mr. Alderman Duckworth, of Rochdale, reported at the Assembly on Wednesday that he hoped by next Assembly to complete his scheme for raising the £20,000 necessary for this purpose. He has promises of £15,000, and £5,000 in cash.

ON Tuesday afternoon a deputation from the Douglas School Board waited upon the Isle of Man Board of Education, and obtained the Board's sanction for the purchase of a site in North Douglas, at a cost of £2,000, for the purpose of erecting a new Board School for the accommodation of about 1,000 children.

AN electric Fire-alarm now being introduced in Switzerland acts automatically through the expansion of a metallic rod under heat. This makes an electric connection, and it is said that the alarm is so sensitive that it is put in operation by holding a lighted match near it.

A MONUMENT is to be erected to the memory of the late Professor Von Helmholtz. In order to effect this object, an international and representative Committee of 180 well-known Scientists has just been formed. The Emperor of Germany has promised 10,000 marks and a free site for the purpose.

THE Corporation of Norwich purposes spending about £200,000 on a system for preventing the pollution of the River Yare by the sewage of Norwich.

THE Yorkshire Union of Artists has opened its eighth annual Exhibition of Pictures in the West Cliff Saloon, Whitby, this being the second year in succession in which the Society has held its Exhibition there. The number of works exhibited is larger than usual, there being fifty more than last year, while it is conceded that the quality of the work is above the average.

Trade and Commerce.

The Joiners' Strike at Rotherham.—

The strike of joiners and carpenters in the Rotherham district has been settled, and work has been resumed after a ten weeks' stoppage. The men asked for the adoption of new working rules and for an advance of wages. For some time after the cessation of employment masters and men held aloof, and there seemed to be little disposition to discuss the questions at issue. An amicable understanding with regard to the rules, &c., has been arrived at, but no advance is made in the wages.

The Liberator Building Society.—

THE WEST WORTHING ESTATE.—Mr. Douglas Young, auctioneer, of London, conducted a sale by auction on Thursday last in a marquee on the estate, when almost the whole of the lots submitted, comprising 100 freehold plots of land, 6 houses, 2 shops, and the West Worthing Club house, were sold, the total of the sale amounting to £16,600. A special fast train from London conveyed a large party of buyers to Worthing. The luncheon was presided over by Mr. Alderman Piper, of Worthing, who made a most encouraging statement as to the active measures taken by the Worthing Corporation in the matter of drainage and water supply to render the town one of the healthiest in England. That this fact was realised by the company present soon showed itself by the spirited bidding for the various lots submitted. Although the reserves were considerably exceeded, the buyers appeared well satisfied with their purchases, and in many cases good bargains were obtained. The remaining portion of the estate, which will be sold in the course of next month, consists of freehold villa plots fronting the Grand Avenue, a thoroughfare 80 feet wide, extending from the station to the sea.

VICKERS' Ink.—This ink is delightfully fluid and fluent; it is a pleasure to use it. Mr. George Vickers (of Angel Court, 172, Strand), sent us a sample on a day when the editorial pen nibs had their digestion disordered, they refused to assimilate ordinary food. The effect of a change of diet was simply marvellous, new ideas graciously came to hand and set themselves down without hesitation. We shall, therefore, continue to use this ink for obvious reasons.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

ABERGAVENNY.—For the erection of drill-hall, Abergavenny, for H and I companies 4th Battalion S. Wales Borderers. Mr. E. A. Johnson, architect, Abergavenny. Quantities by architect:—

Thomas, J. G., Abergavenny*	£1,200	0	0
* Accepted conditionally.			

ABERGAVENNY.—Accepted for the erection of a pair of semi-detached villa residences, Abergavenny, for Mr. G. W. Shackleton. Mr. E. A. Johnson, architect:—

Henry Smith, Wclverley, Kidderminster	£1,180	0	0
---------------------------------------	--------	---	---

AYLESBURY.—For additions to Baptist Chapel, Walton-street. Mr. F. Taylor, architect, Aylesbury:—

Sherwin, W. H.	£1,170	0	0
Gibson, G. H.	1,090	0	0
Grimsdale, H. T.	1,035	0	0
Slasey, W. H.	945	0	0
Wallis and Sons, Chesham (accepted)	827	0	0

BRANKSOME (DORSET).—For making up roads, &c., Princess-road and Eagle-road, for the Urban District Council. Mr. S. J. Newman, Surveyor, Council Offices, Branksome:—

Saunders, S.	£906	10	3
Budden, G. T.	739	6	6
Brixey, H. C.	731	13	3
Saunders, W. H., & Co., Bournemouth*	664	13	6
* Accepted.			

BRENTFORD.—For additions and redecorations to the "White Hart," for Messrs. Fuller and Co., Griffin Brewery, Chiswick. Mr. J. Hume, architect and surveyor, Chiswick:—

Barnes	£158	0	0
Rogers, C.	158	0	0
Dorey and Son	157	0	0
Foord and Son	155	0	0

BRIDLINGTON QUAY.—For the erection of three houses' Trinity-road, for Mr. J. Vevers. Mr. J. Earnshaw, architect, Bridlington Quay:—

Bailey, R.	£1,790	0	0
Hudson, J. H.	1,789	0	0
Rennard, J.	1,645	0	0
Rennard, J., amended tender*	1,620	0	0
[All of Bridlington Quay.]			
* Accepted.			

BURTON-ON-TRENT.—Accepted for the execution of sewage works (Contract No. 17), for the Corporation. Mr. J. E. Swindlehurst, C.E., Borough Surveyor, Burton-on-Trent:—

Jones and Fitzmaurice, Birmingham £1,644 12 0

CROYDON.—For the erection and completion of a block of school buildings in the Boston-road, for the Croydon School Board, comprising boys', girls', and infants' departments, with teachers' rooms, laundry, and cookery centre, caretaker's house, playsheds, boundary-walls, and asphalted playgrounds. Mr. Robert Ridge, architect, 12, Katharine-street, Croydon. Quantities by Mr. Richard Peters, 73, Wool Exchange, London, E.C.:—

Smith, W., and Sons	£16,188	0	0
Bowyer, J. and C.	15,400	0	0
Akers, W., and Co.	15,049	0	0
White and Son	14,955	0	0
Page	14,840	0	0
Smith, J., and Sons	14,659	0	0
Saunders	14,350	0	0
Umlandt and Nicoll	13,100	0	0
Bulld and Co.	12,988	0	0
Bullock	12,190	0	0

[All of Croydon.]

* Accepted subject to the approval of the Education Department.

DARLSTON.—For alterations to the "Duke of Wellington" Inn, Darlston, for S. Woodhall, Esq., brewer, West Bromwich. Mr. Jno. W. Allen, architect, West Bromwich.

Messrs. Morrell Bros., contractors, Vine-street, Bilston.

[Lowest of 4 Tenders.]

EGHAM.—For alterations and additions to the Egham and District Constitutional Club, for Messrs. Gardener Bros. Mr. J. W. Oades, architect, Egham:—

Simpson, A.	£2,384	0	0
Beauchamp and Rowland	2,096	0	0
Gray, G. (accepted)	2,054	0	0

GARTH (S. WALES).—For the erection of six villa residences, Gwaelodygarth, for the Building Club. Messrs. Griffiths and Jones, architects, Market-square, Pontypridd and Tonypandy. Quantities by architects:—

Jones, D. C., and Co.	£2,404	0	0
Jenkins, Jno.	2,375	0	0
Williams and James	2,334	0	0
Richards, A.	2,287	0	0
Colborn, A. J., Caerphilly*	2,179	0	0
Julian, M.	1,744	0	0

* Amended and accepted.

HAVANT (HANTS).—For the erection of dairy buildings, &c., Waterloo-road, for the Belgravia Dairy Co., Ltd. Mr. A. E. Stallard, architect, West-street, Havant. Quantities by the architect:—

Staples, J.	£2,450	0	0
Edwards, J.	2,425	0	0
Perkins, J. W.	2,400	0	0
Peters and Son	2,390	0	0
Hall, T. P., Southsea (accepted)	2,363	0	0

HIGHWORTH.—For new infant school and master's house, Highworth, Wilts, for the School Board. Messrs. Bishop and Pritchett, architects, Swindon:—

Wheeler, W. A.	£4,760	0	0
Webb, J.	4,520	0	0
Wiltshire, G.	4,496	0	0
Barrett, T.	4,493	0	0
Williams, C.	4,469	0	0
Williams, J.	4,396	0	0
Thomas, J., Highworth, Wilts*	4,230	0	0

* Accepted.

HOUNSLOW.—For alterations and redecoration to "The Cross Lanes" public-house, for Messrs. Fuller and Co., The Griffin Brewery, Chiswick. Mr. J. Hume, architect and surveyor, Chiswick:—

Dorey	£738	0	0
Hiscock	728	0	0
Hunt	651	0	0
Brown	578	10	0
Billings (accepted)	575	0	0

KENNINGHALL (NORFOLK).—For the erection of school buildings, for the School Board. Mr. J. B. Pearce, architect, Upper King-street, Norwich. Quantities by architect:—

Ludkin, J.	£630	10	0
Mallot A.	612	15	0
Smith, E., Bunwell (accepted)	552	6	0

LONDON.—For constructing new offices for the boys' and girls' departments of the Eltringham-street School, Wandsworth, and for relaying the soil-drains and a portion of the surface-water drains, providing ventilation, &c., for the School Board for London. Mr. T. J. Bailey, architect:—

Minter, F. G.	£1,890	0	0
Hammond, W.	1,738	0	0
Lathey Bros.	1,698	0	0
Marsland, J.	1,585	0	0
Polden, S.	1,524	15	0
Akers, W., and Co., St. Albans*	1,483	0	0
Nightingale, B. E.	1,136	0	0

* Recommended for acceptance by the Works Committee.

LEDGERY (HEREFORDSHIRE).—For the erection of a public hall at the Royal Oak Hotel, for Mr. E. H. Hopkins. Mr. G. H. Godsell, architect, Hereford:—

Lewis	£1,317	9	4
Smith, D.	1,315	0	0
Hill, G., Ledgery (accepted)	1,298	0	0

For additional works to the same:—

Hill, G. (accepted)	£27	0	0
---------------------	-----	---	---

LONDON.—For refitting the offices of all departments of the Scarsdale-road School, Camberwell, with stoneware troughs and automatic flushing-tanks, and for providing a new system of drainage, for the School Board for London:—

Marsland, J.	£1,665	0	0
Holliday and Greenwood	1,544	0	0
Goad, W. V.	1,495	0	0
Calnan, M., and Co.	1,485	0	0
Downs, W.	1,480	0	0
Newton, G.	1,468	17	0
Whitehead L., and Co.	1,390	0	0
Triggs, E., Clapham*	1,341	0	0

* Recommended by the Works Committee for acceptance.

LONDON.—For erecting three new temporary iron buildings on the Kennington-road site, for the School Board for London. Mr. T. J. Bailey, architect:—

Shaw, W. T.	1,892	10	0
Charteris, D.	1,665	0	0
Dixon, J., and Co.	1,506	12	0
Morton, F., and Co., Ltd.	1,489	17	6
Lysaght, J., Ltd.	1,470	0	0
Cruwys, T.	1,400	0	0
Crogon and Co., Ltd.	1,375	0	0
Keay, E. C. and J., Ltd.	1,358	11	0
Harbrow, W., South Bermondsey*	1,321	0	0
Hill and Smith	1,300	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For providing a temporary iron building in Vestry-road, Camberwell, for the School Board for London. Mr. T. J. Bailey, architect:—

Hawkins, T. J.	£1,123	0	0
Hill and Smith	906	0	0
Shaw, M. T. and Co.	855	0	0
Charteris, D.	845	0	0
Crogon and Co., Lim.	823	10	0
Harbrow, W.	700	0	0
Lysaght, J., Lim.	700	0	0
Cruwys, T., Camden-town*	635	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For forming corridors, doorways, windows, partitions, &c., in connection with the Astley-road School, Old Ford, for the School Board for London. Mr. T. J. Bailey, architect:—

Heale and Farrow	£630	0	0
Calnan, M. and Co.	593	0	0
Willmott, J., and Sons	592	0	0
Gregar, W., and Son	595	0	0
Robey, J. T.	555	0	0
St. ines and Son, Great Eastern-street*	544	0	0

* Recommended by the Works Committee for acceptance.

LONDON.—For providing a complete system of low-pressure hot-water apparatus for the school in Great College-street, Camden Town, for the School Board for London:—

Jenkins, A.	£477	0	0
Duffield and Co.	470	0	0
Comyn Ching and Co.	445	0	0
Wontner-Smith, J., Gray and Co.,			
Finsbury Pavement*	434	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For enlarging the boys' and infants' urinals of the Single-street School, Bow Common-lane, and also for relaying the soil-drains and a portion of the surface water drains, for the School Board for London:—

Jackson, T. H.	£1,694	0	0
Willmott, J., and Sons	1,206	0	0
Craig, T. H.	1,199	0	0
Gregar, W., and Son	1,197	0	0
Atherton and Latta	1,104	0	0
Reed, A., and Son	1,050	0	0
Calnan, M., and Co.	964	0	0
Gibb, D., and Co., West India Dock-road*	945	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For refitting the offices of all departments of the Aldenham-street School St. Pancras, with stoneware troughs and automatic flushing tanks, and for providing a new system of drainage. For the School Board for London:—

Harrison and Spooner	£2,066	0	0
Yerbury, R. A., and Sons	1,697	0	0
Stevens Bros.	1,534	0	0
Akers, W., and Co.,	1,447	0	0
Marshall, R. A.	1,371	0	0
Bangs, J. and H., Camden Town*	1,139	15	0

* Recommended by the Works Committee for acceptance.

LONDON.—For carrying out various works at the Edward-street Transferred School, Deptford, with a view to adapting the building for the purposes of a special school, and also for the accommodation of girls and infants. For the School Board for London:—

Mid-Kent Building and Contracting Works, Ltd.	£420	0	0
Black, A., and Son	410	0	0
Frampton, S.	384	0	0
Boyer, J., and C.	345	0	0
Akers, W., and Co.	325	0	0
Leney, H., Penge*	179	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For extending the low-pressure hot-water apparatus in the new portion of the Ecclesbourne-road School, Islington, for the School Board for London:—

Fraser and Fraser, Ltd.	£552	10	0
Berry, Z. D., and Sons	540	0	0
Jenkins, A.	538	0	0
Duffield and Co.	400	0	0
Comyn Ching and Co., Castle-street, Long-acre*	355	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For the enlargement of the infants' department of the Randall-place School, Greenwich, for the School Board for London. Mr. T. J. Bailey, architect:—

Mid-Kent Building and Contracting Works, Limited	£4,151	0	0
Smith, J., and Sons	4,125	0	0
Kirk and Randall	3,978	0	0
Nightingale, B. E.	3,966	0	0
Patrick, J. and M.	3,859	0	0
Wallis, G. E., and Sons	3,598	0	0
Bowyer, J. and C.	3,490	0	0
Munday, G. W., and Sons, Savage Gardens, E.C.*	3,268	17	6

* Recommended for acceptance by the Works Committee.

LONDON.—For the supply of an elevator and conveyors at the Barking pumping-station, for the London County Council:—

Conveyor and Elevator Co.	£1,157	0	0
Coles, H. J.	893	0	0
New Conveyor Company, Ltd.	612	0	0

JOHN BENNETT, 32, Guilford Street, London, W.C.
GRANITE, MARBLE, MOSAIC & TILE WORK OF EVERY DESCRIPTION.
ESTIMATES AND DESIGNS FREE.
WORKS: 1, 19 & 20, BRUNSWICK MEWS, W.C.

METAL CASEMENTS of every description. GLASS-ROOFING Shelley & Co's & Hopes Patents	HENRY 55 LIONEL ST. BIRMINGHAM LONDON, 15 King St Cheap-side. MAN-CHESTER & Exchange Arcade.
---	--

BRICKS 2½ or 3 inch **PRESSED BRICKS**
 Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
 Brickworks and Railway Siding on Great Eastern Railway.

CARTER & CO
TILES MOSAIC
FAIENCE
Poole Dorset

"ECLIPSE" PATENT GLAZING.
The only Absolutely Imperishable Glazing.
 Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.
MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
 Telegraphic Addresses—"Eclipse," SHEFFIELD. "MELLOWES," LONDON.

ROBT. ADAMS, 67, Newington Causeway, London, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self Compensating

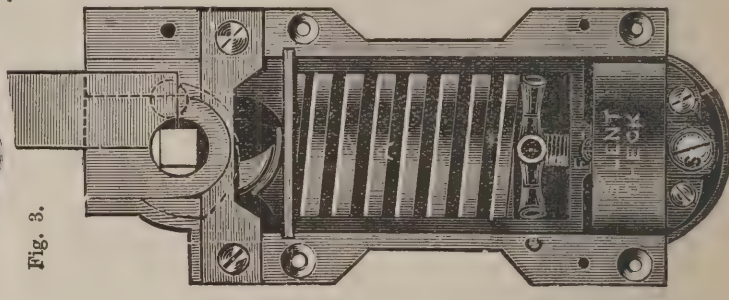
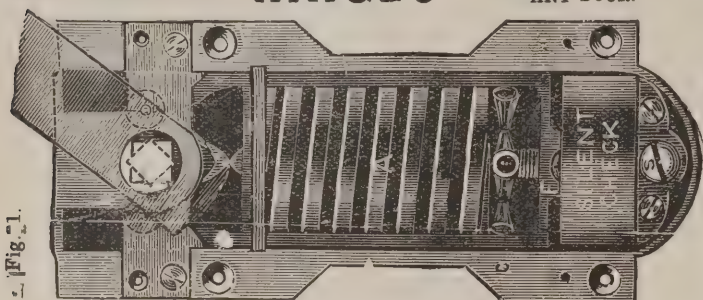
SPRING HINGES

Guaranteed to last
longer and work better
than any hitherto
made.
CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to and
closes from the angle
of 135°

Fig. 3 is the new
Single Action Spring.
It opens to and closes
from the angle of 180°
i.e., "wide back."

THE FIRST
SPRINGS EVER
PRODUCED WITH
THESE GREAT
ADVANTAGES.



LONDON.—For providing and fixing complete systems of low-pressure hot-water apparatus for warming the under-mentioned school buildings now being erected, for the School Board for London:—

Fossdene-road School, Charlton, Greenwich.	
Green, T., and Son, Ltd.	£590 0 0
Russell and Co.	589 0 0
Vaughan and Brown, Ltd.	578 0 0
Maguire and Son	563 10 0
Wontner-Smith, Gray and Co.	550 0 0
Ellis, J. C. and J. S., Ltd.	524 10 0
Clarke, J. F., and Sons	499 0 0
Cannon, W. G., and Sons	496 10 0
Davis, G., Kensington*	476 0 0
47 The Friern, East Dulwich, East Lambeth.	
Fox, W. J.	£769 15 0
Jenkins, A.	712 0 0
Berry, Z. D., and Sons	685 0 0
Jones and Attwood	560 0 0
Maguire and Son	536 15 0
Wontner-Smith, Gray and Co.	533 0 0
Russell and Co.	529 0 0
May, J. and F.	505 0 0
Vaughan and Brown, Ltd.	485 0 0
Davis, G.	481 0 0
Pureell and Nobbs, Cleveland-street*	446 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For providing a new Kindergarten gallery and for other work at the Webb-street School, Bermondsey. For the School Board for London. Mr. T. J. Bailey, architect:—

Leeks and Hooker	£250 0 0
Downs, W.	244 0 0
Johnson and Co., Watling-street*	194 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For the provision of a manual training centre, with a chemical laboratory over it, in connexion with the Hugh Myddleton School, Clerkenwell, for the London School Board. Mr. T. J. Bailey, architect:—

Lidstone, N.	£2,944 0 0
Johnson and Co.	2,640 14 6
Kilby and Gayford	2,560 0 0
Reed, A., and Son	2,550 0 0
Patrick, J. and M.	2,495 0 0
Staines and Son	2,446 0 0
Yerbury, R. A., and Sons	2,430 0 0
Kirk and Randall	2,415 0 0
Shurmer, W.	2,394 0 0
A'len, J., and Sons	2,270 10 0
Roberts, L. H. and R.	2,251 0 0
Treasure and Son	2,230 0 0
Miskin, C. St. Albans*	2,158 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For the provision of manual training and laundry centres in connection with the Goodrich-road School, East Dulwich, for the School Board for London. Mr. T. J. Bailey, Architect:—

Holt, W., and Sons	£2,677 0 0
Mid-Kent Building and Contracting Works, Limited	2,255 0 0
Peacock Bros.	2,239 0 0
Smith, J., and Sons	2,169 0 0
Downs, W.	2,140 0 0
Otway, J.	2,047 0 0
Garrett, J., and Son	2,039 0 0
Triggs, E.	1,911 0 0
Nightingale, B. E.	1,895 0 0
Akers, W., and Co., South Norwood*	1,880 0 0

* Recommended by the Works Committee for acceptance.

LONDON.—For erecting a junior mixed department in connexion with the Gipsy-road School, West Norwood, to provide accommodation for 410 children, and for other work for the School Board for London. Mr. T. J. Bailey, Architect:—

Lawrance, E., and Sons	£12,147 0 0
Shillitoe, J., and Son	12,000 0 0
Downs, W.	11,392 0 0
Bowyer, J. and C.	10,995 0 0
Lathey Bros.	10,807 0 0
Holliday and Greenwood	10,666 0 0
Smith, J., and Sons	10,395 0 0
Nightingale, B. E.	10,294 0 0
Cox, C., Hackney*	10,255 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For alterations at No. 32, Hatton Garden, for Mr. W. H. Baker. Mr. Geo. Waymouth, architect, 23, Moor-gate-street, E.C.:—

Pennack, C.	£775 0 0
Hosegood, B.	750 0 0
Richardson Bros.*	700 0 0

* Accepted. Including other items.

LONDON.—Accepted for additions and alterations to 198 Grove-lane, Camberwell, S.E., for Mr. J. Bach. Messrs. Burchell and Lees, architects:—

John Ham, Camberwell	£340 0 0
----------------------	----------

LONDON.—For erecting four shops in Plashet-road, West Ham for Mr. W. Neil. Mr. George Stooke, architect, 29, Plaistow Park-road, Plaistow:—

Jones and Pearce	£1,595 0 0
Maddison	1,335 0 0
Taylor (accepted)	1,120 0 0

LONDON.—Accepted for alterations to premises, No. 11, King-street, and Nos. 5 and 6, Bridge-road, Hammersmith, W., for Messrs. A. J. Palmer and Co. Mr. Alfred Howard, surveyor, The Outer Temple, W.C.:—

Knight, S., Fulham	£624 10 0
--------------------	-----------

LONDON.—Accepted for sanitary alterations, new drainage system and decorative repairs at No. 4, Gloucester-terrace, Regent's Park, N.W., for Mr. John Rose Auldjo. Mr. R. Owen Allsop, architect, 37, Norfolk-street, Strand:—

Cop, C. C., and Son, 127, Albany-street, N.W.	£761 0 0
---	----------

MACCLESFIELD.—For the erection of a new Wesleyan Chapel at Kerridge. Mr. Elijah Jones, Hanley, architect:—

Clayton, John, Builder Macclesfield*	£1,123 0 0
--------------------------------------	------------

* Accepted.

MAESTEG (WALES).—For the erection of schoolrooms, &c., Nantyllyn, for the Cwmdu and Llangynydd Higher School Board. Mr. E. W. Burnett, architect, Tondur, near Bridgend:—

McGaul, W.	£4,262 0 0
Francis, W.	4,077 0 0
Gaylard, P.	3,900 0 0
Rattary and Jenkins, Pontycymer, near Bridgend (accepted)	3,750 0 0

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and specimens on application. Lithography at moderate rates.

OLDACRES & CO.,
59 & 60, CHANCERY LANE, LONDON, W.C.
N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

ESTABLISHED 1866.

J. J. ETRIDGE, Jr. SLATE MERCHANT, SLATER and TILER.

ESTIMATES GIVEN FOR

SLATING AND TILING,

To be Executed by Contract in any part
of ENGLAND.

Penrhyn-Bangor, Oakeley-Palmerston,

And other description of Slates ready for immediate
delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

NEWPORT (MON.).—For the erection of new business, premises, Clarence-place, for Messrs. Phillips and Sons, brewers, Newport. Messrs. W. Graham Hitchcock and Co., architects, Newport:—

Firbank, J. H.	£4,030 0 0
Jones and Son	3,987 0 0
Jenkins and Sons	3,970 0 0
Prosser, T.	3,957 0 0
Locke	3,950 0 0
Read, C. H.	3,850 0 0
Linton, J.	3,806 0 0
Banbury	3,760 0 0
Hazell, A.	3,697 0 0
Morgan, A. S., and Co.	3,665 0 0
Linton, W. A.	3,548 0 0
Morris, J. T.	3,500 0 0

NEWPORT (MON.).—For the erection of new shop and leather dressing premises, Shaftesbury-street, Newport, for Messrs. W. W. Ware and Co., Cardiff. Messrs. Conyers, Kirby and Sons, architects, Newport:—

Diamond, T. G., Newport	£1,735 0 0
Richards, D.	1,725 0 0
Westacott, T. C.	1,690 0 0
Bowden, H.	1,675 0 0
Jones, W., and Son	1,657 0 0
Linton, John	1,585 0 0
Linton, W. A.	1,523 10 0
Morgan, A. S., and Co.	1,520 0 0

* Accepted.

SOUTH SHIELDS.—New bathroom and additions to house, 5, Wellington-terrace, for Mrs. Ward. Mr. J. Wardle Donald, architect, South Shields:—

Fawcus, W. (accepted)	£142 10 0
-----------------------	-----------

[Lowest of four tenders.]

SOUTH SHIELDS.—For new stable and coach-house for John Readhead, Esq. Mr. J. Wardle Donald, architect, South Shields. Quantities by the architect:—

Goodwin, R., and Son (accepted)	£280 0 0
---------------------------------	----------

[Lowest of three tenders.]

SOUTH SHIELDS.—For the erection of "Westoe Tower," Westoe Village, for T. E. Brigham, Esq. Mr. J. Wardle Donald, architect, South Shields. Quantities by the architect:—

Thornton and Co.	£3,356 14 9½
Sheriff, Stephen	2,988 0 0
Nichol, J. C.	2,670 0 0
Robertson, W. J. (accepted)	2,560 0 0
Christie, William (withdrawn)	2,550 0 0

[All of South Shields.]

SOUTH SHIELDS.—For the erection of Infants' School, Mortimer-road, South Shields. Mr. J. Wardle Donald, architect:—

Brown, H., and Co.	£5,468 10 10
Robertson, W. J., South Shields	5,312 5 10
Thornton and Co., South Shields	5,237 14 8
Goodwin, R. and Sons, South Shields	5,150 0 0
Young, James, South Shields	5,145 0 0
Sheriff, Stephen, South Shields	5,102 16 0
Hunter, Thomas, Washington	4,791 1 0
Miller, J. L., Tynemouth	4,777 14 8
Elliott, Joseph, North Shields	4,760 0 0
Christie, W., Commercial-road, South Shields	4,750 0 0
Brown, W. H. and R., 6, Woodlands terrace, South Shields	4,678 8 3
Howe, Joseph, & Co., West Hartlepool	4,570 13 6

WEST BROMWICH.—For the erection of two houses and shops, Harvill's Hawthorn, West Bromwich, for Mr. Richard Neale. Mr. John W. Allen, architect, West Bromwich:—

Sorrill, Geo.	£750 0 0
Woodward, R. and E.	717 0 0
Smith, H., and Son (accepted)	699 0 0
Chapman, Thos.	690 0 0

[All of West Bromwich.]

SPHINCTER WORKS,
EMERSON STREET, LONDON, S.E.,
MANUFACTURERS OF
**LECLANCHE BATTERIES, TELEPHONES,
ELECTRICAL THERMOGRAPHS,
WATER TELEGRAPHS, and COMPLEX
COMMUNICATIONS of all kinds**

The Builders' Journal.

Vol. I., No. 25.

Tues., July 30, 1895.

ILLUSTRATIONS.

House at Oxted: Entrance Front: R. A. Briggs, Architect 385	A Dining Room Fire-place: By R. A. Briggs 391
The Farm Buildings, Bickley Hall: Ernest Newton, Architect 387	House at Northwood: R. A. Briggs, Architect 392
The West Door of Llandaff Cathedral: Measured and Drawn by William Eaton, A.R.I.B.A. 389	A Bungalow Design: By R. A. Briggs 393
	A House in Queen's Gate: R. A. Briggs, Architect 395

CONTENTS.

The Admiralty Offices 385	Men who Build, No. 23.—Mr. R. A. Briggs .. 392	The Chapel of a Milanese Basilica: Interest- ing Model in Edinburgh Museum 397
Should Westminster Abbey be added to?... 385	Roman Walls in England and Germany: From Correspondents 394	Domestic Architecture in the Midlands: An Instructive Archæological Excursion 397
A "Condemned Area" in Sheffield 386	The Wall Decoration of Mediæval Churches 395	Professional Items..... 398
Carlyle's House at Chelsea: Interesting Relics and Memorials 386	How Ancient Jerusalem was Discovered: Beneath Feet of Modern Rubbish..... 396	Society Meetings 399
An Old Glasgow Architect on Some Older Ones: By Thomas Gildard 386	A Day in a Cistercian Abbey 396	The "Builders' Journal" Competition.... 400
Bricks and Mortar..... 388	Roman Carpentry 397	Trade and Commerce 400

The Admiralty Offices.

IN the initial issue of THE BUILDERS' JOURNAL, a couple of geometrical drawings were given of the new Admiralty Offices in St. James's Park. At that time the buildings were far from complete, and no judgment whatever could be formed as to how the drawings were working out in execution. A morning contemporary, noted for its utter ignorance on Art matters—particularly Architectural—notifies the completion of the block, and believes "it will probably be very generally allowed that externally it is, upon the whole, a very satisfactory addition to the official edifices of London, while, as regards the interior, it is in all the requirements of lightness, healthiness, comfort, and real utility, superior to anything yet erected in London." About its lightness, healthiness, comfort, and real utility, we shall be able to speak when we have an opportunity to survey its internal arrangements, but of its external appearance it may be said at once that a more trite and commonplace design has never been made for a great national building for many years. How far this has been influenced by officialdom and financial meanness we do not know; but we do know that if this is the kind of Architecture that the Capital of England indulges in for its great public works, it is time some really competent authority should be placed at the head of the department of State that controls such things. It is totally insufficient that buildings of this nature should be "admirably adapted to their purpose," as the *Daily News* puts it. Public buildings of a great country have a higher motive than a mere adaptability to the duties of a handful of the community. They should teach a lesson even to the poorest-minded creatures walking in their shadows; a lesson in ambition, a lesson in nobleness, a lesson in respect. Public buildings are milestones

in the history of a country. They should be the finest of their kind, the best that money can procure, the living Art of the moment. They should not become the catspaw of a democratic Chancellor of the Exchequer, who finds in a nice plain building, "admirably adapted to its purpose," an easy way through the polling booths at the next General Election. We have in the Capital of this great Empire many extraordinary public buildings, a conglomerous mass of everything that Architecture is not. Shining out from that mass is Barry's wonderful Palace of Westminster, England's noblest work for centuries, and Norman Shaw's new Scotland Yard, a building yet to be under-

Should Westminster Abbey be added to?

THE attitude of the new Government with regard to the Westminster Improvement and the vexed question of adding to the Abbey is likely, we hear, to be in great measure the attitude of its predecessor. For this little bit of continuity of policy we are honestly thankful. Government policy in Architecture has always been fearfully and wonderfully made, but by-and-bye an orator may be born who will rouse the country to enthusiasm in the Art of Building by means of a "purely Constructive Policy," to adopt one of the catch phrases of both parties. For the present we are quite sure that

orator remains to be born. However, we understand upon authority that the change of Government will make little or no difference to the policy of the Office of Works, in regard, especially, to the recommendations of the Royal Commission on Westminster Abbey. Mr. Akers Douglas, the new First Commissioner, is at one with his predecessor, Mr. Herbert Gladstone, as to the advisability of taking the vote of the Commons before deciding upon the best site for the proposed Monumental Chapel. Therefore the offer



HOUSE AT OXTED: THE ENTRANCE FRONT: R. A. BRIGGS, ARCHITECT.

stood. If with these we include Street's masterpiece in the Strand, forgetting its west elevation, and the great want of cohesion in the whole design, only remembering its beautiful Great Hall and the fine detail of the whole work, we have actually nothing left but Architecture at its lowest, and the lowest of the lot is either Sir Gilbert Scott's monstrosity on one side of the Horse Guards' Parade, or Messrs. Leeming & Leeming's Admiralty Offices on the other. Which is actually the worst, we have no inclination to discover. "Real utility" upon "the whole" are so eminently the mere jingle of phrases that one wonders how a daily contemporary can print such stuff as criticism.

of £38,000, for the erection of this building which was made by Mr. Yates Thompson, still awaits acceptance or refusal. The old controversy as to whether a private donor should be allowed to immortalise himself at the expense, so to speak, of the venerable Abbey, will face the new Commons, together with the alternative sites upon which the Royal Commission split. The late First Commissioner completed the negotiations for acquiring the houses in Old Palace Yard, the removal of which was unanimously recommended on the ground that they not only conceal to a great extent the Architecture of Henry the Seventh's Chapel and the ancient Chapter House, but are also a constant

source of danger to the Abbey by fire. The vote in the Civil Service Estimates, in which provision is made for the purchase money and costs, was passed before the dissolution, so that there is nothing to hinder the authorities from beginning the work of demolition whenever they feel disposed. Mr. Herbert Gladstone's idea was to postpone operations until the autumn and winter months, when men engaged in the Building Trades are most in need of employment, and we understand that Mr. Akers-Douglas concurs in the suggestion. With regard to Mr. Yates Thompson's offer, the gift was conditional upon the adoption of the Old Palace Yard site. We think the late Government acted wisely in deferring a decision. One half of the Royal Commission were in favour of the Old Palace Yard site, but the other half—including Mr. Plunket (the First Commissioner of Works in the last Conservative Administration), Mr. Alfred Waterhouse and the late Mr. L. J. Jennings—preferred what is known as the Refectory site. In face of so marked a divergence of opinion, it would have been presumptuous of Mr. Shaw-Lefevre, who was First Commissioner when Mr. Thompson's letter was written, to assume the responsibility of determining the question. This view of the matter was the more convincing seeing that Mr. Shaw-Lefevre was himself strongly wedded to Mr. Pearson's scheme of utilising the area about to be cleared in Palace Yard. One of the arguments adduced in favour of Mr. Pearson's proposal was that the Side Aisles and Chapel, which would be the lowest part of the new building, would not come within 50 feet of the corner of the existing houses. Mr. Plunket and the other advocates of the Refectory site contend, however, that the erection of any structure calculated to conceal the Architecture of Henry VII.'s Chapel and the ancient Chapter House is objectionable. We are not quite reconciled to the idea of adding to the Abbey at all. It seems to us a dangerous thing, granting what skill and discretion you please, to tamper with either the symmetry or the sanctity of Westminster Abbey, and it is a moot point whether the proposed Chapel will not do both. However, no doubt the Commons will "thresh out" the question in their way. Only, as a matter of detail, the average member really knows little about Architecture, and cares less. A committee of experts had much better endeavour to agree.

A "CONDEMNED AREA" IN SHEFFIELD.

Two years ago the City Council took in hand the improvement scheme for dealing with the insanitary area in the Crofts. Most of the property has now been acquired, and the practical carrying out of the scheme, which involves the demolition of a large number of houses occupied by the working classes, cannot be much longer delayed. The difficult question arises, how best to deal with the displaced population. Various suggestions have been made, one being that the Corporation should build workmen's houses, and let them at rents which might possibly not bring in income sufficient to pay the interest on the outlay. A member of the Town Trust is anxious that the Trust should take over the whole or a part of the condemned area, level the houses thereon, and build new ones; or if the Council preferred to carry out the scheme, that a purchase should be made after the area had been cleared. The matter has not been fully discussed by the Trustees, but in view of the limited funds at their disposal it is hardly likely that a scheme of such proportions and involving such large financial responsibility would be undertaken by them. It is interesting to mention that at the June meeting of the City Council in 1893 a resolution was carried on the motion of Mr. Stuart Uttley, seconded by Mr. Llewellyn, instructing the Health Committee "that in any scheme which they may make for the improvement of any unhealthy area or

areas they shall appropriate a certain part of it as a site for the erection of dwellings for the working classes." It would, therefore, seem as if the Council had already committed itself to the policy of erecting working-class dwellings.

CARLYLE'S HOUSE AT CHELSEA.

INTERESTING RELICS AND MEMORIALS.

THOMAS CARLYLE'S dwelling house at Chelsea, which was opened to the general public on Friday, is a well-built specimen of late 17th century Architecture, three storeys high. The gathering at the private view was modest, and it will not be until the actual centenary of Carlyle's birth (December 4th) that any representative celebration will be attempted. The Committee have succeeded in gathering together a very fair collection of personal relics, which, so far as possible, have been placed in the positions they occupied when Carlyle died. At present the rooms increase in interest, the higher one gets up. On the ground floor are two small rooms containing an old bookcase, black with age, and two tables and chairs, but nothing otherwise notable. The Drawing Room on the first floor contains similar furniture, plain almost to severity. Over the mantelpiece is a picture of he rugged old man on horseback, and on another wall there is a coloured sketch representing him in the evening of life, not long before he died. Another large, black bookcase covers one side of the room, and this is filled with well-thumbed, tattered volumes in German and English, ancient copies of Shakspeare, faded and yellow, and several homely volumes of Bohn occupying conspicuous places. But this room has another interest. Within it took place those brilliant gatherings of English men of letters which, for a whole generation, made the modest life abode of Thomas Carlyle the most famous and memorable in the land. Dickens was here, and Browning, and Forster, and Tennyson, and Leigh Hunt, the foppish French Count d'Orsay, swift-witted Douglas Jerrold, Laman Blanchard, Edward Irving the preacher, and the famous painters Maclise and Stanfield. Leading directly from this room is Mrs. Carlyle's Bedchamber and Dressing Room, one of the walls being adorned with a portrait of her face, with its sweet expression and sad, regretful eyes. On the second floor is Carlyle's Bedroom and the "spare" room where Ralph Waldo Emerson slept during that memorable visit of his. Carlyle's bed was an old-fashioned four-poster, and here again the accompanying furniture is of almost Spartan plainness. His hip-bath stands in a sort of dressing-closet, and on the table is his old silk hat, venerable and battered and strange of shape. Carlyle had a leonine head, and this hat of his would slip over the entire face of most men. Carlyle occupied the Bedchamber from 1834, for 47 continuous years. The third and last storey is the most interesting in the house. Carlyle added this room in 1853 at a cost of £200, and made it, as he fervently hoped, proof against sound. "Frederick the Great" was written here. The walls are still covered with prints and portraits of that monarch, faded brownish maps, and a notable portrait group of the most famous German philosophers. A black hair-seated arm-chair is near the fireplace. On the completion of "Frederick" Mr. Carlyle gave up this room, as the noises from the street below penetrated as clearly here as anywhere else. In the winter of 1880 he vacated his old Bedroom also, and in 1881 lived mainly downstairs in the Drawing Room, there to die on February 5th of that year.

The report of the Committee which was formed to make the purchase of the dwelling shews that £2,033 has been collected to date, but of this there has been an expenditure for freehold and repairs of £1,844, leaving a balance of £189. There is, however, a further estimated liability of £245 outstanding, and no maintenance fund has been provided as yet.

At a meeting of the Glasgow Corporation last week it was decided that the price of gas be reduced 2d. per 1,000 cubic feet, being from 2s. 6d. to 2s. 4d., the latter being the lowest rate at which the illuminant has ever been supplied to Glasgow.

AN OLD GLASGOW ARCHITECT ON SOME OLDER ONES.

By THOMAS GILDARD,

HONORARY MEMBER OF THE GLASGOW ARCHITECTURAL ASSOCIATION.

II.

HUTCHESON'S Hospital School has, like the Union Bank, been so altered and added to that there is little of Mr. Hamilton's building to be seen. Originally, although not without some play of composition, it was comparatively plain, the Trustees being either unable or unwilling to expend much money, or thinking that plainness in even such an important School was enough for its situation.

A considerable time intervened between the building of the Wings of the Normal Seminary and the building of the centre part, with its square-columned Porch and Clock Turret. The Turret is well outlined, but I do not think that the connection of the later with the earlier work is, in some particulars, well managed—some of the leading features of the original not being carried along, whereby the composition is less integral than it might have been. I have little doubt that the cause of the Seminary not being erected all at once was the want of money, for Mr. Stow, the enlightened and zealous promoter, did not enjoy much public recognition of his doing the State some service. I have seen, as if Mr. Stow was the subject of Goldsmith's lines—

"Even children followed with endearing wile,
And pluck'd his gown to share the good man's smile."

It is not creditable to Glasgow that there is no public memorial of a man who was such an advanced pioneer in the reform of education.

St. Paul's Church in John Street is comparatively small, but perhaps few buildings by Hamilton are more characteristic of his manner.

A good example of Hamilton as a Tenement Architect is the Cleland Testimonial at the corner of Cathcart and Buchanan Streets.

Mr. Hamilton was essentially a Roman Architect, and such buildings as the Royal Exchange and Hamilton Palace place him in that style in the very foremost rank among modern Architects. They are of the best type of Roman—simple yet dignified in conception, powerful yet subservient in detail, and not overburdened or distracted by pompous and assertive ornament.

In Mr. Hamilton's time the Gothic revival had made little progress, and as his principal achievements had been in other styles, it is possible that he had little sympathy with it. Saint John's Church, off Gallowgate, is an example of his work in Gothic. Its detail is certainly not the most exemplary, but viewing it as Sir Walter Scott advised Melrose to be viewed, it is seen to be a composition of great dignity of proportion. Pictorially it is one of the grandest features in the civic scenery of the East End, and seen from the Fir Park, it is an impressive object in even the general picture of Glasgow.

Mr. Hamilton was more successful in the Jacobean style. Dunlop House, finished shortly before I began my apprenticeship, is in that style, and was one of his favourite mansions. An addition to an old house is what was originally intended, Sir John Dunlop having some sentimental regard for what had been the ancestral home, but the addition's claims and charms advanced with steps, perhaps slow, but sure, and at last took possession of the old home with the exception of one solitary chamber.

In the Houses of Parliament competition Mr. Hamilton was awarded the third premium. The style which he adopted was the Elizabethan or Jacobean.

In the Donaldson's Hospital competition Mr. Hamilton was one of three Architects selected, the others being Gillespie-Grahame and Playfair.

Mr. Playfair's design was chosen, and Mr. Hamilton's, I understand, received an honorarium of £300. Mr. Hamilton's elevation was Ionic, the arrangement of parts being somewhat similar to that of the principal façade of Hamilton Palace.

A somewhat exhaustive list of Mr. Hamilton's works will be found under the article "David Hamilton" in the "Architectural Publication Society's Dictionary."

The office hours were from nine till seven, the hour between four and five being the in-

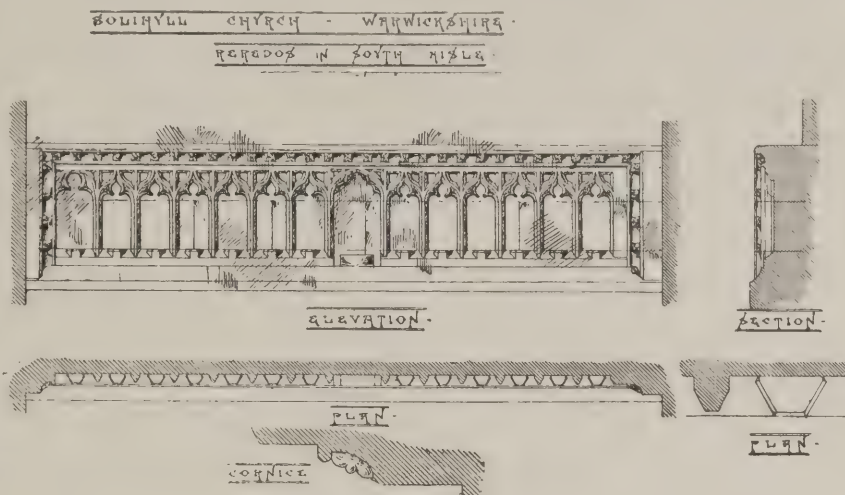
terval for dinner. On Saturday the office closed at four. There was no gas in the office, and in the winter evenings we wrought by candle-light.

Two assistants of long before my time were James Gibson and John Thomson. The Hamilton family always spoke of James Gibson with affection for his kindly disposition, and with praise of his abilities. He died shortly after having begun business. John Thomson became Architect of the Tennant Town Residence in West George Street (in which is shown much of the manner of his matter), and of Elmbank Crescent, a range of buildings possessing many excellences well worthy of careful study.

The Hamiltons' method of get-up or finish of drawings was somewhat different from that presently in practice. Both father and son were exceptional colourists, as also had been an older son, William (who had been dead many years before the time I am speaking of). Hence, as much as from it being the custom of the period, all sketch elevations were highly coloured in India-ink, sepia, or in a brilliant style after the manner of the famous architectural painter, Roberts. The drawings were not merely washed over, but all the shadows were carefully projected. The effects were produced by repeated coats of transparent colour; even the plans and sections of "working-drawings" always received two coats. I remember there was over the mantelpiece an elaborate perspective, by William Hamilton, of an Italian court or quadrangle, in which the shadows were almost absolutely black, nevertheless, they were so transparent that the most delicate mouldings and ornaments beneath them were as visible, clear, and distinct as when the drawing-in pen had newly left them. The colouring of James Hamilton—who possessed remarkable abilities as an Architect and draughtsman, as well as colourist—was less laboured, more sketchy, than that of his father and older brother, and often showed much depth and brilliance. The writing on the sketches and working drawings was invariably in a peculiar small back slope, and done with a

sions, &c., and many of them of great beauty, by a misunderstanding, fell into the hands of an Architect of no great professional repute, and and now some years dead, and he ignominiously consigned them to an underground cellar, where they remained literally to rot.

The late John Mossman's father made a bust of David Hamilton; another, by Patric Park, is in the Corporation Galleries, alongside that of Glasgow's other great Architect, Alexander Thomson; and his portrait was painted by Saxon and Macnee. In the dining room there



was a fine portrait of the Duke of Hamilton who built the Palace, testifying to friendship no less than to professional association; and, I believe, that Mr. Hamilton was also familiarly known to the Earl of Eglinton. This grand old Architect knew how to deport himself in the society of dukes and earls.

A contemporary of Mr. Hamilton was Peter Nicholson, who is better known to us as the author of such standard books as "Treatise on Perspective and Isometrical Drawing," "The Architectural Dictionary," and "The Carpenter's Guide," than as a practising Architect. For Glasgow he designed Carlton Place, and in this, to transpire the line of the poet, we find his work inspired by what his precepts taught. I know one of the houses, that of Mr. Robb, banker. Its plan is unique, and the Dining Room and Library are remarkably fine rooms, the

Church, the Lunatic Asylum in Parliamentary Road (now offices of the City Parochial Board), and the late Hunterian Museum. The Jail was one of the earliest endeavours in this country to apply Greek Architecture to our commonplace circumstances, and although, of necessity, it has windows, they in nowise detract from the broad and severe treatment, proper alike to the style and to the purpose of the building. The Doric portico, with its deep recess, is not only of great dignity in itself, but is in aptest harmony with the general composition. Unfortunately, by repeated alterations on the street level, the building is now sunk from its original platform. I have heard it said that Stark would have liked the composition to have been a superstructure upon a low stylobate. The Steeple of St. George's Church, may, in beautiful and picturesque outline and fine play of light and shade, perhaps vie with even the best of Wren's. And yet there have been attempts, again and again, on one pretext or another, to have this beautiful Steeple and the Church removed, one being that they stood in the way of the public convenience, and another—adding insult to injury—that the valuable site might be occupied by a building for business. The traffic is not yet so great as to require

their removal, and the greater the traffic becomes, they will be of the greater advantage—it being diverted, that going west taking the one side and that east the other. There was a proposal at one time to convert the Church into Municipal Buildings. Mr. Low made a design in which he took down the Church, but retained the Steeple, piercing it on four sides, and utilising it as an alcove for a public statue or a fountain, or as a refuge from a shower, or a waiting-place. The Lunatic Asylum was at the time of its erection considered one of the best planned in Europe. For external effect, its plan is exceedingly happy, an octagon, with wings branching from four of its faces, and this octagon resolving itself into a circle crowned by an oviform Dome of great beauty of outline—the arrangement of octagon and wings affording opportunity for grand massive effects



THE FARM BUILDINGS, BICKLEY HALL: ERNEST NEWTON, ARCHITECT.

crowpen, not the steel imitation, but cut from the quill of the wing of the veritable *cornix*. Full-size detail drawings were always inked in and coloured.

It might be expected that David Hamilton left many interesting drawings, but a very large number, chiefly details, were burned when it was found that there was no room for them in the office, and a less honourable fate befel others that had been kept carefully in portfolios. These portfolios, containing drawings of the Great Queen Street Theatre, the Royal Exchange, Hamilton Palace, Churches, Man-

former decorated by sculptured panels on the walls. It is claimed for Nicholson "that he was the first who discovered that Greek mouldings were the section of a cone, and he defied any person to prove that he ever derived any information from foreign works."

Another contemporary of David Hamilton, was William Stark, of whom Sir Walter Scott said that "more genius died than is left behind among the collected universality of Scottish Architects." He has given to Glasgow four public buildings, of varied character, and all of the highest excellence—the Jail, St. George's

of light and shade. I can scarcely believe that the finial on the Dome was the work of Stark. It is both bad and out of place. Of course, the exigencies of the different purpose have necessitated great alterations on Stark's original design, and I hesitate to say whether they have all been made with judgment.

(To be continued.)

At Daniel Stewart's College, Ravelston, Edinburgh, a new Gymnasium and Recreation Hall was formally opened last week, at a cost of some £1,800.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
July 30th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

It was rumoured a little while ago that the old Rolis Chapel, in Chancery Lane, was to be transformed into a Museum, and thus made the connecting link in the chain of buildings forming the old and new Record Offices. The necessary authority for stopping the services and generally preparing the way for the alteration had been granted, but even now the services are being continued, though the new Record Office, which faces Chancery Lane, is almost completed, and quite hides the ancient Chapel from public view. We hear, however, the services will be stopped next month, and that the Chapel will then be placed in the hands of the builders, who, while they have to retain as far as possible the historic portions of the building, have several alterations to make in order that the structure shall become perfectly proof against fire, for its walls will contain some of the most valuable documents that the nation possesses, including autograph letters of our leading statesmen, papal bulls of great antiquity, and, above all, Doomsday Book. The Chapel will be so enclosed by the outer walls of the new Record Office that it will be necessary to provide a top light, and this will necessitate several extensive alterations, while the Rolls House, formerly the residence of the Master of the Rolls, is to be swept away, in order to make room for the Wing of the new building.

THE Dean of Guild Court, Edinburgh, has just passed plans for altering one of the few remaining ancient buildings of the High Street. The tenement adjoins the Assembly Hall, and was purchased last year for the Church of Scotland. It is situated in a court known as Boswell's Court, so called from one Dr. Boswell who lived there about 1760. The house, however, is very much older than that, and even without any record of its history, it must have been in existence at least 100 years before. The front, to Castle Hill, is in polished ashlar, with numerous lofty and narrow windows, and still retains some fragments of the moulded string-courses and a goodly row of dormer gables, with finials of varied designs, now much weather-worn. The original doorway, which is also the door to an old-fashioned turret stair, remains with its mouldings fairly entire. Over it is the lintel, with a panel and inscription, which speaks plainly as to its age, "O Lord in the is mi traist," and some initials. The plans, now passed, will complete the improvement scheme of the Assembly Hall, originated and carried through so far successfully by the efforts of the Rev. Dr. Mair, of Earlston. In these alterations the Architects, Messrs. Hardy & Wight, have provided on the two lower floors ample accommodation much needed by the Assembly. The external aspect of the old building will be carefully preserved in all characteristic features, and the rough walls rough-casted and repaired.

WHATEVER happens to the County Council's Water Bills in the new Parliament one thing is certain: provision must be made for the future needs of Londoners. The Council is the only

authority which can introduce a new water supply, and the Water Committee has boldly let its designs be known. Like Liverpool and Birmingham it is proposed that London should go to Wales. The Council's engineer has fixed on the Wye district, and here magnificent watersheds have been surveyed, 312,400 acres in extent, capable of yielding a daily supply to London of 415,000,000 gallons, after allowing for compensation water. This water is more than the whole average flow of the Thames in summer. Considering the greatness of London and its magnificent possibilities, this scheme is relatively no larger than the new supplies of Manchester, Liverpool or Birmingham. The total cost is estimated at £38,800,000, but it would only be necessary to carry out part of the scheme at first—introducing an extra supply of 200,000,000 gallons daily.

At the National School of Fine Arts, Paris, the ten selected works for the Prix de Rome have been on view. This prize, which enables the holder to travel for three years, with all his expenses paid, is the most coveted distinction annually offered to the pupils. The competitors are winnowed out of a great many more, and it is considered a great honour in itself to be included in the ten. Extraordinary precautions are taken to secure the originality of the works submitted to the judgment of the Academicians. A student who has won the right to a *loge*, as each small studio in the fine building on the Quai Malaquais is called, has to prepare and submit a sketch in forty-eight hours, during which period he sleeps, eats, and works in solitary confinement, leading a hermit life in his cell. The drawing which he supplies to the examiners contains the merest suggestion of the elements of the future work, but it is sufficient to prove the identity of the crude conception with that of the finished painting, which has to be executed in seventy-two days. For better or worse the pupil once pledged to a particular form of treatment may not alter it, and to indicate that he has not done so the small rough pencil sketch is appended to the frame of the large canvas. This year the subject given to the competitors was "Christ at the Foot of the Cross, Mourned by the Marys." The ten paintings are typical of the several Schools of Art which are now being taught in this city, one or two being fantastic in the extreme; but according to the opinions expressed, the Grand Prize is destined to fall to Laurens, the son of Jean Paul Laurens, a well-known Artist, and a member of the adjudicating body. Laurens the younger is the only competitor who has portrayed Mary Magdalene as a woman still in the possession of physical beauty.

RESIDENTS in the Metropolis will find an article about themselves in the current number of the "Quarterly Review," which cannot be called complimentary in any sense. It is entitled "Londoners at Home," and its burden is that, as the Cockney seldom owns his house, he is in a bad condition, and "London, its gifts considered, is the least efficient and least influential aggregate of people on the globe." In matters of taste the working classes are, it seems, demoralised, and, what is still worse, the ethics of the trading classes appear to be no better, for it is stated seriously that "the aborigines of North Siberia are possibly superior to Londoners in that first element of commerce, common honesty." Perhaps the writer's climax is found in the assertion that "Londoners habitually live as leasehold tenants, or as lodgers only, not in territorial dignity as freeholders of their own homes. Not true to themselves, but eager for the property of others, people so submissive and demoralised could hardly be entrusted with the honour of their country or with its defence in case of war." Anything less like the London of to-day, the healthiest and largest city in the World, the most peaceful, one of the best-ordered, and pre-eminently the most public-spirited and Imperial-minded, we have never seen, and it is a surprise to find it, of all places in the World, in the "Quarterly."

It would almost seem that a panic had set in with regard to the condition of our English Cathedrals. It is now Salisbury's turn. Mr. E. H. Hulse, as member for Salisbury for

the past nine years, writes: "I am anxious to draw your attention to an appeal which is being made by the Dean and Chapter of Salisbury for the necessary funds to prevent the decay, and consequent destruction, of the most graceful of all our Cathedral Spires in England, and, perhaps, in Europe. It appears from the subjoined report of Sir Arthur Blomfield that a great deal of the external stonework is split, and it is imperatively necessary to render the angle turrets immediately secure. No mere repairs would suffice, but the work of restoration must be carried out to ensure the safety of this Architectural gem, which the Old World and the New World alike admire. The sum of £5,000 is required for the immediate preservation of the Tower, and already operations are in process around the north-west turret."

Here is Sir Arthur Blomfield's report:—"During the progress of certain minor repairs in the Central Tower it became evident that something was seriously amiss with the upper part of the two western stair turrets which required investigation. A scaffold was accordingly erected round the north-west turret, from which a close and careful examination has been made, with the result that its state proves to be even worse than was feared. A good deal of the external stonework is split and fractured, and is in so loose and unsafe a condition that no assurance can be given of security from some serious disaster which might at any time occur. Certain cracks which are observable internally, especially one in the base of the Spire at this angle, though they are certainly not altogether new, show indications of a slight recent movement which would inevitably become dangerously aggravated by any considerable fall of portions of the external stonework. It is difficult to determine with certainty the precise cause of the present state of things in these turrets, but various adverse agencies have no doubt been gradually at work for many years past. Of these the principal are, first the numerous iron bands, rods and ties which have been introduced from time to time, many of them in the most injudicious manner. An attempt has been made to protect some of them with lead from wet and consequent corrosion, but this has in many places altogether failed, and made matters worse rather than better. The next agents are wet and frost, which have gradually done much damage; and the third is to be found in the great thrust of the Spire, which is continually active. Nothing can be done to lessen or modify this element of danger, but it is imperative to render the angle turrets, which receive so much of it, as sound and strong as they can be made. For this purpose any attempt at small repairs or patching would not only be useless, but positively dangerous. The work that is called for by the necessities of the case is emphatically not one of restoration, but of repair, which is absolutely essential for safety, and which to be effectual must be complete and thorough. The greatest care, caution and skill will be necessary in dealing with the damaged portions of both these turrets. I should recommend the completion of the north-west turret first, to be followed immediately by the repair of the corresponding one on the south side."

THE new Church of St. James, at Handsworth, has now been completed and the consecration ceremony took place on Tuesday last. Mr. J. A. Chatwin, Architect, was asked to submit designs for a large extension of the existing edifice, or for a new Church in which the old Sanctuary was to be utilised. The original structure was an unattractive building with a huge Gallery, very deficient in ventilation, and generally condemned as being Ecclesiastically and Architecturally bad. Mr. Chatwin's proposal was to remove the old Gallery and add a new Nave, Chancel, South Aisle, Baptistery and Organ Chamber, at a cost of about £7,000, and, his designs being approved, the work was commenced about twelve months ago. The result is that a well-proportioned, commodious Church has taken the place of the unsightly and inconvenient building which had outlasted its generation. The old Church now forms the North Aisle, and the Chancel becomes a Morning Chapel. The contract was given to Messrs. Thomas Barnsley and Son.

THE maintenance and repair of the Houses of Parliament, internally and externally, present figures sufficiently startling at first glance. Building operations cost every year £13,765, the renewal of furniture £3,520, and the warming, ventilating, and lighting of the buildings £16,590. The system of warming and ventilating the Houses of Parliament is most elaborate. The air is pumped in from the River Thames, and sent through pipes packed with cotton wool to cleanse it; it then passes through heating chambers in winter, and through cooling chambers in summer, before it is distributed by fans through the building; £2,200 worth of coal is consumed every year in working the machinery of this system of ventilation. There is a resident engineer with a salary of £400, and a further sum of £5,000 is paid in wages in this department. The coals supplied to the apartments of the Lords cost £500, and to the Commons £1,200. The annual gas bill of both Houses is £3,000; the bill for electric lights £1,800, and, curious to relate, in addition to the gas and electricity, the use of oil lamps costs £1,250.

IN an interesting preface to Messrs. Osgood's new edition of "A Pair of Blue Eyes," Mr. Hardy, the novelist, who was an Architect by profession, says the novel was written at a time when the craze for indiscriminate Church restoration had just reached the remotest nooks of Western England, where the wild and tragic features of the coast had long combined imperfect harmony with the crude Gothic Art of the ecclesiastical buildings scattered along it, throwing into extraordinary discord all Architectural attempts at newness there. To restore the grey carcases of a mediævalism whose spirit had fled seemed a not less incongruous act than, to set about renovating the adjoining crags themselves.

ON the site of the old House of Detention now stands one of the most recent and finest buildings erected by the London School Board—the Hugh Myddleton Schools. These buildings are being utilised for exhibition purposes in order to show what is being done under the London School Board in connection with manual training, Art studies, and hand-and-eye training. The recent demand for attention to what is now termed "suitable occupations" in all Schools gives to this Exhibition a special interest to all engaged in the management of Elementary Schools, as well as to teachers under the Education Department. In fact, the advance made by the London School Board in work of this kind is so great, that representatives from countries from which the ideas connected with hand-and-eye training were originally borrowed are now attending in London to learn the art of going forward. To

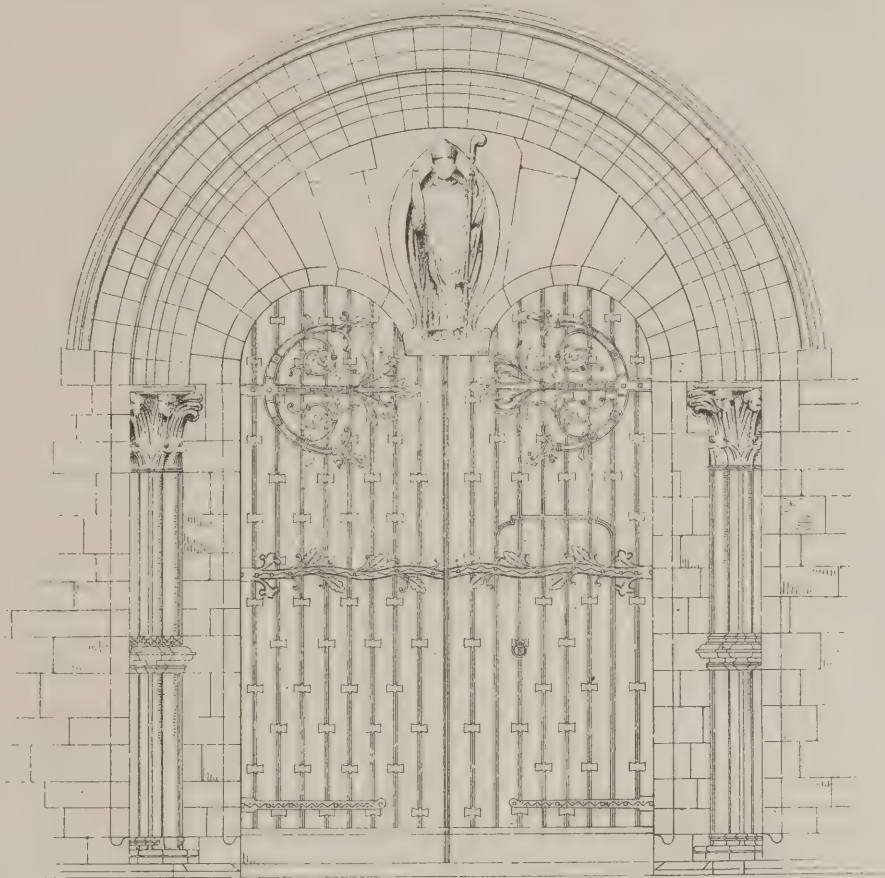
teachers seeking information concerning "suitable occupations" for lower standards, it may be intimated that paper work in the form of making simple designs in coloured paper seems by far the most general means of meeting this portion of the Code requirements. Colouring in crayon is much less frequently shown, while water-colour work for young scholars has but two exponents, one School tinting outlines; while a rival method, called brush work, has been adopted in the other department. Of course, exceptionally advanced work in water-

being established by a cable 200 feet in length. Since the organ is not visible from the Church below, and is separated from the organist by the full length of the building, the effect when the music breaks forth is very striking.

IN the course of a lecture on Light Railways and Cable Ways, given at the weekly meeting of the Balloon Society, Mr. W. J. Brewer, after referring to the importance to Commerce of cheap and easy transit, and to the Conference which had been invited by the late Government on the subject of Light Railways, went on to describe the suspended cable way system which he had invented, and which had been successfully at work at the Dyke, Brighton. The cost for a light railway of this kind would be about £250 per mile, exclusive of cars and engines. The advantages were, first, as to cost, which, taking weight for weight, would be vastly cheaper than a surface line of the ordinary type. It would not interfere with the land, and he believed it especially met the difficulty of transport now felt in many manufacturing districts, for by its goods could be conveyed speedily and at a cheap rate from the manufacturer to the railways. Then it did not require locomotives nor level crossings, nor did it in any way interfere with the ordinary traffic on roads. The system, he said, was capable of enormous development. There was no reason why whole trains of railway carriages, and waggons should not be taken across rivers by this means, and he also proposed to ascend mountains by zig-zag lines. As to motive power, the system was equally open to gas or electricity. Mr. Brewer added that he had perfected a cable system for surface lines where the overhead track was not considered advisable.

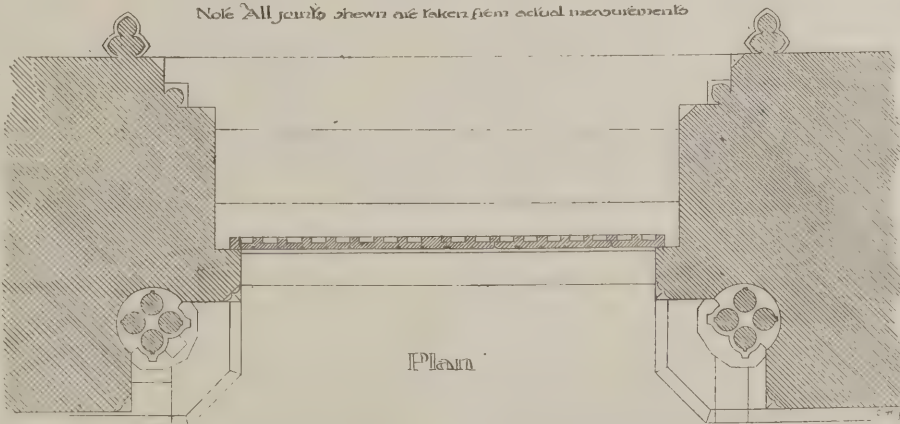
SIR STUART KNILL, who, with the Governor of the Bank and Sir Joseph Dimsdale, is heading a movement to secure from the Barber-Surgeons' Company the famous historical Painting by Holbein for the Guildhall Art Gallery, has received a letter from Sir Francis Cook, of St. Paul's Churchyard, stating that he was very much interested in this fine historical picture, and he understood from Mr. Temple, the director of the Art Gallery, that the

suggestion to purchase it had not as yet made much progress. He felt very strongly that the picture never ought to leave the City, and he sincerely hoped that City men and the Companies would not allow that most interesting relic of the past to go elsewhere. He thought the picture ought to find a resting place at the Guildhall, and with that view he would be happy to contribute £500 towards its purchase, if during the next six months such a sum as the Barber-Surgeons' Company might consider sufficient could be raised.



Front Elevation

Note All joints shown are taken from actual measurements



Plan

THE WEST DOOR OF LLANDAFF CATHEDRAL: MEASURED AND DRAWN BY WILLIAM EATON, A.R.I.B.A.

colour drawing is to be seen from a special few elder scholars, but this type of work is expected from but few Schools.

THE celestial organ presented to Westminster Abbey by Mr. A. D. Clarke is now set up in the triforium of the South Transept. Though in all respects a separate organ, complete in itself, it forms part of the grand instrument in the Choir. It is controlled from the same console, and may be used in conjunction with the great organ. The action is electric, connection

A PAPER by Mr. H. Rye, on "The Building Stones and Canals of Rievaulx Abbey" greatly interested the members of the Archaeological Institute in their session at Scarborough. A tradition, observed the writer, lingered around the glorious ruin of Rievaulx Abbey to the effect that stones and other building materials had been brought to the site in boats, but nobody, so far as he knew, had attempted to show how and by what means. There were two distinct kinds of stone in the early work, and in the later work a third stone was used. This last was the easiest to trace and was found first. The earliest took a little more finding, and the second was the hardest of all to locate. The earliest stone was a dark brown sandstone, and came from a quarry about a quarter of a mile from the Abbey, in the direction of Bilsdale, close to the river bank. The quarry was called "Penny Piece." Of this stone the whole of the Norman work was built. Having found the quarry, he looked round to see how the stone could be got to the Abbey by boat. He discovered the traces of the banks of a canal running down to Rievaulx Mill. To get the water into this canal a dam would be required, and the ruin of a big stone dam was plainly to be seen. But the bank or Byland side of the River Rye was low, and an earthwork had to be thrown up, and here it was that their documentary evidence began. Finding that the building stone could be got down to the river, that the dam could be thrown across and so bring the water to the site, also that they could work their Mill and keep the drain clean, the monks went to Roger, the Abbot of Byland, and obtained a charter which enabled them to commence operations. The dam on the Byland side could be plainly seen about fifty yards long. The work went on and was finished in the reign of the great St. Ælred. The Norman period was given as 1066 to 1154, and was followed by the Transitional. St. Ælred's reign would extend 13 years into that period; and they knew from his writings that the Abbey prospered, for he said he governed 300 monks, also that "they drank nothing but water, ate little, laboured hard, slept little and on hard boards, never spoke except to their superiors on necessary occasions, and loved prayer." No doubt the fame of St. Ælred drew many to Rievaulx, and the buildings were not large enough. Gifts came in, and an enlargement of the buildings was made. In the Chapter House and Cloisters they found Transitional work, and that a new stone was in use. This new stone came from a place in Bilsdale, where there had been vast quarrying operations, not only for building stone but also for iron stone; and as oak grew wild in Bilsdale, it was probably used for roofing the new Cloister.

MR. J. WILLIS CLARK gave a Paper before the Architectural Section on "Libraries," illustrated by about 70 lantern slides. He began with the Libraries of the Ancient World, where the books were kept in presses (*armaria*), and then passed to the different Monastic Orders. He showed by quotations from the Rule of St. Benedict and the Orders which succeeded, that reading was one of the duties of all monks, and that a Library was formed in every Monastery. At first the books were kept in a press (*armarium*) in the Cloister, which was the centre of the monastic life, where the reading went on at stated times. Afterwards, when books had become too numerous for the Cloister-presses, a separate room was built to contain them, general during the thirteenth century. Mr. Clark then showed that the Cathedrals of the old formation, and the Colleges of Oxford and Cambridge, were building and fitting up Libraries at the same period. He next alluded to the furniture. The earliest bookcase was probably a sort of elongated lectern, of which an example still survives at Zutphen, in Holland, in the Library attached the Church of St. Wallburg, and in the old Library of Lincoln Minster. These desks would contain but few books, so gradually a system which wasted space less was adopted, with two shelves on each side, and a desk in front. The books in these early cases were all fastened by chains, and so a reader's seat, or a desk, was a necessary part of them. After the invention of Printing, chaining was gradually given up, and then bookcases with more shelves in them, but

still placed at right angles to the walls, were adopted. The first Library fitted with shelves against the walls was that of the Escorial (1584), and the first in England that built by Wren at Lincoln for Dean Honywood (1675). Finally, Mr. Clark gave a short sketch of private Libraries during the Middle Ages, illustrated by pictures taken from illuminated manuscripts in the British Museum and elsewhere.

THE Burns Monument at Ayr, unveiled in 1891, will be completed by a bronze panel representing "The Parting of Burns and Highland Mary," the sculptor being Mr. George E. Bissell, Poughkeepsie, New York. Three sides of the Monument have already been filled. The fourth panel, fronting the west, which was left for friends in the United States to complete, will therefore soon be placed. The subscriptions of 25 dols. each have been secured by the Hon. Wallace Bruce, of Brooklyn, New York, ex-United States Consul at Edinburgh. Twenty-three subscribers represent eleven States of the Union.

FOUNDED in Greville Street, Covent Garden, in 1829, the Royal Free Hospital soon outgrew the building in which the institution had its inception. In 1842, extensive premises in the Gray's Inn Road, formerly used as the Barracks of the Light Horse Volunteers, became vacant, and, being well adapted for the purposes of the charity, were purchased, and the Hospital was removed to its present site. Since then a Wing has been added, out of funds provided by the Freemasons of England, the freehold has been purchased, and in 1876 another building, containing 500 additional beds and a large out-patient department, was completed and opened, being named the "Victoria" Wing in honour of the Queen, the patron of the Hospital. Other enlargements followed, and in 1892 a fund was initiated at a Mansion House meeting to complete the reconstruction of the Hospital by rebuilding the Front, which was the only remaining portion of the old Barracks. The urgent necessity for better accommodation impelled the Committee to commence this work at once, and its completion now places the Governors in possession of a Hospital containing 160 beds, replete with every convenience for the treatment of the sick poor. The cost of the new buildings, which relieves about 2,000 in-patients, 20,000 out-patients, and were opened by the Prince of Wales, has been £30,000. Mr. William Harvey is the Architect.

MEMBERS of the Liverpool Engineering Society recently paid a visit to the Lytham Sewerage Works, at the invitation of Dr. L. Fisher, J.P., Chairman of the Urban District Council. Mr. Paterson, of the Hermite Company, explained that the system experimentally adopted at Lytham is that known as the "Hermite" process, which briefly consists of electrolyzing sea water, in order to produce chlorine, and then passing this antiseptic through the sewers, which has the effect of completely sterilising the sewage and of preventing the evolution of sewer gases.

THE whole of the new portion of the Midland Conservative Club, Birmingham, which has just been added to the old building in Waterloo Street, is carried on brick piers and iron girders. Messrs. Essex, Nicol & Goodman, the Architects, had some difficulty in planning the new buildings so as not to offend the owners of the adjoining property by interfering with their rights as to the light, but they have admirably succeeded to a large extent by constructing the upper part with Mansard roofs. The interior of the Club has been re-modelled by the omission of the Lavatories on the first floor and the enlargement of the Card Room. The stone steps of the Staircase, which were much worn, have been levelled by means of Granolithic concrete, and, together with the Hall, the Staircase has been decorated in light colours, while the walls of the various rooms have been covered with papers of artistic designs. The special feature of the Smoke Room is the provision of a green paper of a conventional foliated pattern, the design of Burne Jones. The Lounge is divided from the Hall by an Oak Screen, lighted by side windows and a lantern, and decorated with handsome Japanese paper, relieved with golden-coloured

mouldings. The ceiling of the Reading Room is finished in anaglypta, which is picked out in colours, and the Billiard Room is papered in light colours and varnished, the ceiling looking very pretty in its brilliant colouring. The Dining Room is resplendent with colour. The walls are covered with a paper of a unique and artistic design by Beresford Pite. This shows a background in two shades of red with a bold yellow lily, which has the effect of being in relief. The ceiling coves and cornices are decorated in distemper, in light harmonious colours relieved with a considerable amount of gilding; and the apartment is lighted by four massive electroliers, each carrying eight lamps. The Club is now lighted by electricity, and the Kitchens in the basement are ventilated by means of fans driven by electric motors. The structural alterations have been carried out under the direction of the Architects by Messrs. Surman and Sons; Mr. W. H. Coulton has decorated the buildings; Messrs. Verity have supplied the electric-lighting fittings; and Messrs. Pickup and Co. have completed the ventilation.

GRACE DARLING'S Monument is in a lamentable condition. It was blown down during the gale of November last, and has never been touched since. The memorial figure had a stone canopy over it, supported by stone columns. The whole of the columns and canopy are now down, while portions of the iron railings and also some part of the figure have been smashed. Grace Darling is represented with hands crossed and an oar by her side, within sight of the islands rendered famous by her deed. In a cottage facing the Church the heroine was born and reared.

MR. HOGARTH, who has been excavating the Temple of Hatasu at Der el Bahri, recently delivered a highly interesting lecture to members of the Royal Society. Mr. Hogarth said that a great deal of light had been thrown on a very obscure period of Egyptian history by the discoveries made during the excavations. Early in 1887 Mons. Mariette began operations at Der el Bahri, but beyond clearing away some of the rubbish from one of the chambers very little results were obtained. The work, however, was taken up by Mons. Naville in 1893, and now we had before us one of the finest Temples ever discovered in the Nile Valley. On the west wall were sculptures showing the arrival of Queen Hatasu's fleet in the land of Punt. This fleet had been sent out by order of the Queen to obtain frankincense and other aromatics, and also to bring back certain trees for the purpose of replanting in the gardens attached to the Temple of the god Amen. Mr. Hogarth pointed out that the Egyptian Artist never could succeed in freeing himself from conventionalities, but in the case of this Sculptured Chamber there had at least been an attempt to alter the usual stiff style of Egyptian Art. A large quantity of potsherds or ostraka, as they are technically called, were discovered on the site. These, however, only date from Coptic times, there having been an early Christian Convent on the mound in about the fourth century. During the process of excavation a very remarkable discovery of foundation deposits were unearthed, consisting of hoes, adzes, and small objects the use of which had not yet been explained. The columns which supported the Temple were of the order known as "Doric," but the Lecturer did not seem to believe in the popular idea that they were ever copied by the Greeks in their Art.

THERE is a story going the rounds about two very distinguished archaeologists—Sir William Wilde and Dr. Donovan. It seems that they made an excursion to the Isles of Arran, where interesting remains of archaeological nature have been found. They came across a little rough stone building, and both entered into a fierce argument as to the exact century of its erection. Finally each claimed a date, one giving it the sixth century and the other a later one. A native, who had listened with gaping mouth and ears to the lengthy and learned terms used by the disputants, broke into the conversation with the remark: "Faix, you're both wrong so far as that little buildin' is concerned; it was built just two years ago by Tim Doolan for his jackass."

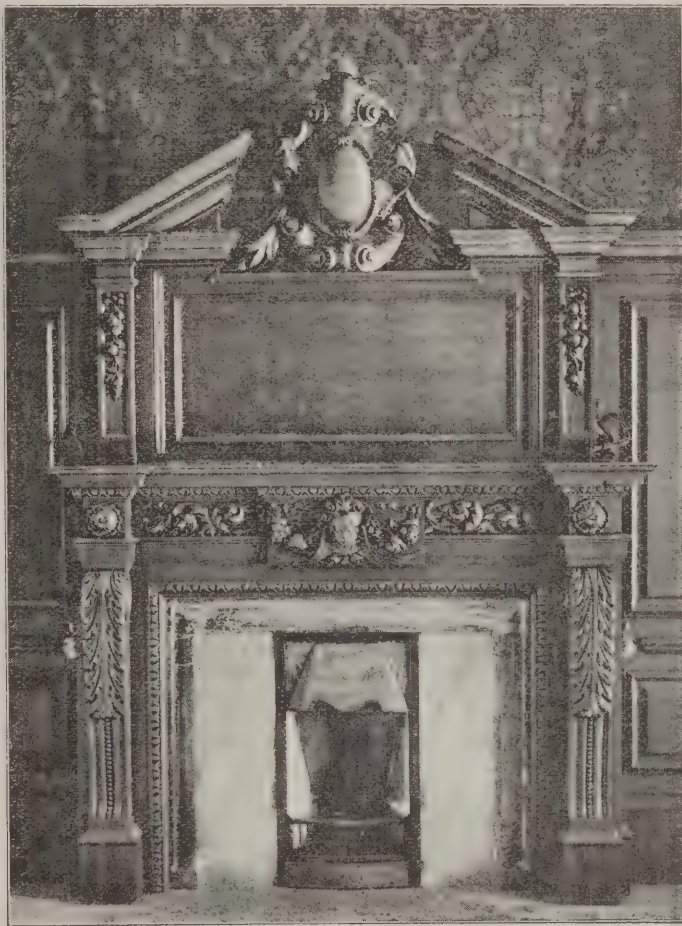
ON Wednesday the Foundation Stone of the New Meat Market and Slaughter Houses which are being erected in Bradford Street, Birmingham, was laid by Councillor Parkes, M.P. The work is the largest of its kind which has been undertaken in Birmingham by the Corporation, and when it is completed the city will be in the possession of a Market which will favourably compare with that of any other town in the country. The designs selected were those prepared by Messrs. Essex, Nicol & Goodman, Newhall Street, who adopted all the latest improvements to be found in the English and German systems. The building is being erected by Mr. John Bowen, at an estimated cost of £50,000. This is for the building alone, and does not cover the cost of the site, nor the provision of cold stores in the basement under the Meat Market, machinery for pumping water, refrigerating plant, electric-light installation, &c. When everything is taken into consideration, the total cost of the whole scheme may be put down at about £90,000. The Market has a frontage to Bradford Street of about 300 feet, and it extends to Cheapside, where the frontage is of a similar length, the depth between the two thoroughfares being about 320 feet. It is deemed of the highest importance that, in the erection of a number of Slaughter Houses, the departments should all be on one level, and on the level of the Meat Market the Architects have arranged for three retail Slaughter Houses and wholesale Slaughter Houses, Pig Lairs, Triperies or Offal Houses, cattle and sheep yards, and gangways, and ample room has been left between the various departments, so as to admit of plenty of ventilation. The Cold Storage and Freezing Chambers are placed underneath the Market Hall, the approach to them being either from the subway which communicates from the wholesale to the retail sides, or by the lifts by which carcasses can be readily dropped and run along the corridors on the travelling gear. The Engine and Machinery Department adjoins the refrigerating plant, and the apparatus for destroying condemned meat is placed on the retail side. At the Bradford Street end a small portion of the ground floor area will be occupied by the inspectors and collectors, and staircases will give access to the Superintendent's Office and the official rooms.

THE most novel engineering scheme in the construction of a foundation is the one recently used in New York—to freeze a bed of quicksand which impeded the work. A row of four-inch pipes was sunk to a depth of forty feet. These pipes were capped at the bottom, and contained inside similar pipes open at the bottom. From a large condenser cold air was forced through these smaller pipes into the larger, from which it returned to the condenser. The air was cooled to a temperature of about 45 deg., thus freezing the surrounding mud and wet sand, and checking their flow into the excavations.

MR. W. B. RICHMOND, A.R.A., and Mr. E. Onslow Ford, A.R.A., were on Friday night elected Royal Academicians. Mr. Onslow Ford's work as a sculptor has lain chiefly in the direction of portraiture. In 1883, he completed statues of Mr. Henry Irving as Hamlet, and of Mr. Gladstone. His statuette "Folly" was purchased under the terms of the Chantry Bequest. He was born in London in 1852, and became an Associate of the Academy in 1888. Mr. William Blake Richmond, whose fine cartoons were recently described in THE BUILDERS' JOURNAL, is the son of the late Mr. George Richmond, A.R.A., and was born in 1843. He was a student at the Royal Academy, and exhibited so early as 1860. For some years afterwards he worked in Italy, and his career as an English painter practically

dates from his return to this country in 1870. He was Slade Professor at Oxford from 1878 to 1883, and was elected Associate of the Academy in the same year as Mr. Ford.

THOSE who fancy that the painter's skill comes to him by nature, and that hard work has little to do with it, will receive small encouragement from Mr. Alma Tadema, who, in presenting the prizes to the Students of the National Art Training School, emphasised the need for persevering labour, declaring that Art was not so much the outcome of the individual brain as of continuity of experiences which, concentrated in one specially gifted mind. He insisted also on the importance of the minor Arts, because of the influence exerted upon the community by the nature of their surroundings. When he found that the black Pompeian decorations of his early Antwerp Studio made him paint too heavily, he had his Working Room coloured red. Then his pictures got too hot. Upon arriving in Berlin he painted his Studio light green.



A DINING ROOM FIRE-PLACE, BY R. A. BRIGGS.

DR. LEGGE, the bishop of the diocese, reopened the Lady Chapel at Lichfield Cathedral on Wednesday last, and dedicated numerous gifts and offerings for its use and adornment. The gifts include an Altar-piece, two large windows of ancient glass, ten alabaster statues of virgin saints, alabaster Altar rails, the great South Transept window, four other windows in the Choir Aisles and the Chapter House. The latest additions, which are entirely for the enrichment of the building, have been made at an outlay of £4,000, no part of which has been taken from the fund raised for the repair of the fabric.

THE recent visit of the Lord Mayor of London to Bexhill, in the Diocese of Chichester, led to a curious discovery. It having been decided to present an address of welcome, the organisers of the affair, somewhat naturally, expressed a wish to have the Arms of the See emblazoned on the document. Application was accordingly made to Dr. Durnford for a die wherewith to carry the idea into execution, and in searching for this among the Cathedral

archives the venerable prelate brought to light a block which had lain aside for over a hundred years, and which differed in a material respect from that which has recently done duty. Burke and other authorities on Heraldry give the arms of the Bishop of Chichester as containing a central figure of Prester John sitting on a tombstone with a mitre on his head and a sword in his mouth, and it is this emblem which appears upon the modern edition of the Episcopal Seal. It would appear, however, that the figure formerly depicted was that of *Salvator Mundi*, with the customary insignia. Dr. Durnford, who is in his 93rd year, declares that he is too old to undertake the task of probing the matter to the bottom, but the doubt which has arisen might furnish an absorbing topic of discussion amongst archaeologists.

A MONUMENT which is to be erected to Alfred de Musset on the Place de St. Augustin, Paris, will be taken in hand immediately by the sculptors Mercié and Falguière. Eighteen years ago a committee was formed with the object of erecting a statue to Musset. Some of its members have passed away, and have their monuments already. The one they met to erect exists still only on paper. Balzac has been waiting about three years for the statue promised by the committee, but the delay of the Musset statue has been six times as long. Meanwhile bronze and marble effigies, bearing obscure names, abound.

THE National Competition of Art at South Kensington shows better results this year than on previous occasions. There are so few Gold Medallists that they can well be mentioned in detail. Miss Winifred Smith, of Birmingham, is first on the list with her designs for book illustrations, she having also won the Princess of Wales' scholarship of £11. The other Gold Medallists for the year are Mr. C. A. Sheehan, of Bristol, for a model design for a Panel; Mr. A. H. Hodge, of Glasgow, for a design for an Art Gallery; Mr. Charles Quennell, of Lambeth, for the same; Mr. H. H. Woolidge, of New Cross, for a model of a figure from the antique; Miss Laura Johnson, of Nottingham, for a monochrome painting of figure from the antique; Mr. Ernestine Willoughby, of Plymouth, for a modelled design for wall decoration; and Mr. J. R. Duffield, of Sheffield, for studies of historic styles of ornament. No fewer than eight Silver Medals have fallen to the lot of Birmingham competitors, these being Miss Mary J. Newell, Miss Agnes Manby, Miss Martha A. Onions, Mr. Ormond E. Gollins, Mr. William Hayes, Mr. H. A. Payne, Mr. Edwin F. Reynolds, and Mr. Alfred Watson. Twenty-two Bronze Medals go to Birmingham, and two to Wolverhampton, while Birmingham competitors have gained forty-five book prizes.

THE proposed extension of the Liverpool Museum in order to provide increased accommodation for the valuable Natural History Collections contained therein, and especially for their better scientific arrangement, has attracted a good deal of attention in scientific circles. Indeed, not only in London, but also in the United States, in quarters interested in such matters, nothing but approval has been expressed in regard to the plan which it has been resolved to adopt of arranging the collections so as to present to the visitor the lowest forms of life in the animal and vegetable kingdoms on his entrance, gradually introducing him from room to room to those of nearest affinity in ascending order till the highest are reached. It is recognised that when this is accomplished, the Liverpool Museum will be the first, certainly in Europe, and probably in the World.

A SHORT time ago there was unearthed at Linlithgow, in connection with the restoration of the Parish Church, an interesting tombstone, which is supposed to have marked the burial place of two of the earliest Provosts of the Royal Burgh. This relic has now, at the instigation of the Town Council, been erected in the wall of the Church adjoining St. Catherine's Aisle, celebrated as the spot where the apparition appeared to King James IV. on the eve of the battle of Flodden.

It was resolved some time ago that a permanent Memorial should be established at East Brent, Somerset, to commemorate the jubilee of Archdeacon Denison's appointment as vicar of the parish. It has now been agreed that this Memorial shall take the form of the restoration of the Cross in the Churchyard, the base of which has been standing for about five centuries, and the Bishop of the diocese has signified his warm approval of the scheme, together with his intention of visiting East Brent on August 4th, when the jubilee festivities will take place, and of officiating at the dedication of the Cross when finished.

THE acquisition by the British Museum of the celebrated Cabinet of Drawings and Sketches by Old Masters, and of Engravings of the Early German and Italian Schools, formed by the late Mr. John Malcolm of Poltalloch, gives additional interest to the exhibition of a selection of the choicest examples from the collection which has been arranged in the Public Gallery of the Department of Prints and Drawings at the Museum. A glance at these is sufficient to convince the connoisseur that the authorities are to be congratulated on their action in securing for the nation such beautiful treasures of Art. Perhaps the gem of the collection is the fine penwork on pink prepared paper of a study for a figure of Abundance, with attendant children, by Sandro Botticelli. Of Leonardo Da Vinci, there is a magnificent drawing of a profile study of the head of a warrior in fantastic armour—a work which Professor Colvin considers shows the energy and subtlety of the great master's hand perhaps better than any other example of his early Florentine time. Raphael is represented by several charming drawings of studies of male and female heads, and by a most beautiful study in pen and bistre for a group of the holy women and apostles weeping over the body of Christ. Examples of drawings by Michael Angelo, Correggio, Titian, and the other old masters of the Italian School, and a selection of a series of about two hundred drawings and sketches by the most famous masters of the French, German, Flemish, and Dutch Schools, and of about the same number of rare early engravings of the German and Italian Schools, illustrate the extent by which the national collection has been enriched.

THE purchase by the Liverpool Corporation of the undertaking of the Liverpool Electric Supply Company has been effected so quietly that neither the public nor the City Council knows anything about the terms, except the broad fact that the sum to be paid amounts to something like £400,000. The success of the purchase transaction depends upon the passage through Parliament of the Boundaries Extension Bill, and nothing definite is yet known as to what will be the fate of that measure this year.



MEN WHO BUILD.

No. 23.

MR. R. A. BRIGGS.



OFFICE it that what we mean by a Bungalow is an artistic little dwelling, cheaply but soundly built, with a proper regard to sanitation, and popped down in some pretty little spot, with just sufficient accommodation for our own particular needs. Moreover, it is not necessary that an English Bungalow, like its Eastern original, should be a one-storied building. A Cottage is a little house in the country, but a Bungalow is a little country house, a homely, cosy little place, with verandahs, balconies, oriels and bay windows, while the plan is arranged to ensure complete comfort, with a feeling of rusticity and ease; a place where Herrick might have sang:—

Here, here I live with what my board
Can, with the smallest cost, afford;
Here we rejoice because no rent
We pay for our poor tenement
Wherein we rest, and never fear
The landlord or the usurer.

These sentiments are those of Mr. R. A. Briggs, who has more than once written on "Bungalows." By virtue of a long study of the delightful little buildings, a vast number of which he has erected in all parts of the country, he has been recognised as an authority upon a modest phase of Architecture which interests but casually the ordinary practitioner. In England it would be unsuitable to build Bungalows like those that are met with in India—low, squat, rambling houses, with latticed windows and flat roofs, and every conceivable device for keeping out the scorching rays of the sun; nor can we have Colonial Bungalows—mere huts, built of logs, with rough shingle roofs, and no glazing to the window-sashes. Land and bricks, and timber, and comfortable commodities must

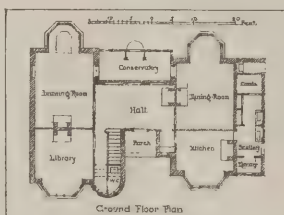
be paid for in this delightful land, where, in spite of Herrick, there are landlords and taxing usurers in whatever corner of the shires one elects to hide one's self. To you, the Bungalow is a much neglected thing. Mr. Briggs has discovered, as hundreds of others must have discovered, any number of peaceful nooks where the jerry builder is not attracted, and where the price of land and the demands of the rate collector are no bar to the complete enjoyment of inexpensive living. If the pleasant soldier Architect had done nothing more than to



enhance the popularity of his little dreams of brick and wood, he would have done a deal more than many of his more ambitious contemporaries.

Robert Alexander Briggs served his articles with one Gilbert Redgrave, a good man and true, eclipsed, however, Architecturally, by his pupil. You can hardly carry in your memory the actual dates of your contemporary's movements, and so the date of the pupilage is lost. But in 1883 you find Robert Briggs walking off with the Soane Medallion, by the aid of a drawing which proudly hangs over the mantelpiece of his own room in Devonshire Square, surrounded

by specimens of almost all the recognised Architectural draughtsmen in England. His fifty pounds took him to Belgium, North Germany, and through to Italy, where he did much study and sketching, spent a deal more money than was actually necessary, and lingered round Pompeii until his friends began to wonder what had become of the Soane Medallist. In the House of the Wounded Adonis he found colour and he remained to copy it. The Mosaic work in the Museum at Naples lured him on with paint brush and pencil. In St. Martin's at Ypres he stayed to draw



House at Northwood.



R. A. BRIGGS, ARCHITECT.

most of the horrible grotesques in which the place abounds. At Mayence, the Reredos in the Side Chapel captivated his sketch book, and at Nuremberg, on his way home, he perforce must pay a return visit to complete some unfinished work from St. Lawrence. He did not neglect France, as one may assume from the numerous drawings and articles of Furniture which have appeared from time to time in *Furniture and Decoration*. In fact, it may be said that among the best things Robert Briggs has yet done is his Series of Furniture Designs which happily have never trespassed upon the Gothic Cult. He seems to have taken the best French work, cut away from it much of the effeminate feeling which does not find very much favour in English eyes, and given us bolder, stronger and better work, harmonising with the teachings of our own convictions.

In his actual Bungalow work, Mr. Briggs has been extremely happy, not quite so

and dead, show their own strong individuality on everything they do or did.

In this one point Mr. Briggs has failed, not that the failure shews weakness of purpose or of study, but merely that steadfastness of faith which makes strong men stronger, and a reputation that transcends over the waves of fashion and opinion.

At the moment Mr. Briggs is engaged on some fine additions at Battenhall Mount, for Mr. Percy Allsopp, for whom he is erecting a Private Chapel, in which the studies of those old Soane Medallion days are likely to have full play.

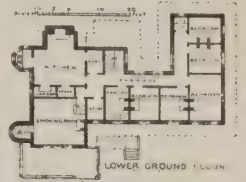
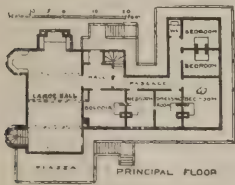
FOR the disturbance of his residence by the entry into London of the Manchester, Sheffield and Lincolnshire Railway Company, who proposed to buy up the house for the purposes of their new Station at St. John's Wood, Jerome K. Jerome, the well-known author, was on Thursday, in the Middlesex Under-Sheriff's Court, awarded £500 compensation. The

THE BUILDERS' JOURNAL COMPETITIONS No. 4.—A Village Church.

The drawings submitted in the Village Church Competition have been handed over to Mr. Arthur C. Blomfield, M.A., who has kindly consented to adjudicate upon them. His report and the result of the Competition will be published in our next issue.

THE WEST OF ENGLAND EYE INFIRMARY COMPETITION.

THE Competition for the West of England Eye Infirmary has been decided, and the names of the authors of the selected designs announced. Thirty sketch designs were sent in for the preliminary competition, and out of these Mr. Charles Barry, who acted as assessor, selected five to be worked out in the final. Ultimately he considered "Exe" to be the best. The Committee have unanimously confirmed Mr. Barry's choice. We append the names of the authors of the selected designs in the following order of merit, also confirmed by the Committee: "Exe,"



A BUNGALOW DESIGN BY MR. R. A. BRIGGS.

happy perhaps as he might have been had he been a little more conservative in his designs. For instance, the design which appears on the present page is extremely good. The "massing" of the little house is perfectly done; the large room is a feature practically unknown in any other domestic building of its size, and there is a pretension about the whole thing which is delightfully in opposition to the country house of Commerce. Yet this is the only design we have seen from Mr. Briggs' pencil which shows the absolute freedom of his own individual work. In many of his other published works, the wishes of the clients are easily detected. A good Architect is the man who, knowing what is good, has the facility for forcing his knowledge over the wishes of the man who builds, and that is why such domestic men as Norman Shaw, Ernest George, David Brandon, E. J. May, E. W. Godwin, Butterfield, and others, living

plaintiff's case was that his house, which he rented at £90 a year, with the option of purchase, was very secluded, enabling him to carry out his literary work with absolute privacy.

THE largest Graving Dock in the World, just constructed by the London and South Western Railway, as part of its scheme of Dock extension at the port of Southampton, will be opened on Saturday by the Prince of Wales.

THE so-called "Limmer Bridge" in Hanover, which crosses the Leine near Schwanenburg, has fallen at last. The bridge was very old, and was allowed to remain undisturbed for the sake of picturesque antiquity. A lad of ten happened unfortunately to be on the bridge, and was killed by the stonework falling upon him.

THE new High Pavement Higher Grade Board School at Stanley Road, Nottingham, was opened recently by the Mayor. The cost of the building, which is the most completely equipped for educational purposes of all the Board Schools in the country, was £10,528 os. 6d. exclusive of fittings. It will accommodate 588 scholars.

Messrs. Edward Thomas & Sons, of 7, Queen Anne's Gate, Westminster; "Health," Mr. Ernest Herbert, of 32, Bedford Row, London; "Aloa," Messrs. Shoebridge & Lewis, of 103, Strand, London; "Outpatient," Mr. W. F. Edwards, of 184, Lazell Street, Birmingham; "In Oculis," Mr. H. F. Talbot, of 7, Cherry Street, Birmingham.

THE COVENTRY COMPETITION.

WITH regard to the competition for the Coventry Municipal Buildings, respecting which we gave a detailed criticism in a recent issue, together with sketches of the first premiated designs by "Leofric, the Saxon," we are now in a position to state the names of the authors of the designs, which were by Mr. Harry Quick, of Coventry, Messrs. Brewill & Baily, Nottingham, and Mr. C. E. Mallows, Bedford.

It has been decided by St. Martin's Vestry to carry out improvements in St. Martin's-place and Charing-cross-road, at an estimated cost of £1850

ROMAN WALLS IN ENGLAND AND GERMANY.

THE N. A. A. VISIT CILURNUM AT CHESTERS, NORTHUMBERLAND.

[FROM CORRESPONDENTS.]

MR. N. G. CLAYTON, of Chesters, has upon his estates the remains of the Roman Wall, which together with its Mile Castles and Stations, can still be clearly traced stretching across the country from the Tyne (on the east) to the Solway (on the west). Members of the Northern Architectural Association, including Mr. F. W. Rich (vice-president), Messrs. J. H. Morton, J. T. Cackett, A. B. Plummer, E. Shewbrooks, W. Glover, F. Caws, H. Grieves, H. C. Charlewood, C. T. Brown, W. Hope, H. Gibson, C. S. Errington, H. Cayley, H. Oswald, R. Morton, E. J. Watson, M. Martinson, R. Sisson and R. Rich, visited Chesters on the 20th inst. for the purpose of inspecting the Station. Mr. Robert Blair, conducted the party. In front of Mr. Clayton's residence at Chesters, and between it and the North Tyne River, are situated the remains of Cilurnum. They cover an area of rather more than five acres, only exceeded in size by Amboglanna at Birdoswald, in Cumberland.

Cilurnum (as inscriptions have proved) was garrisoned by a people from Asturia in Spain. Cilurnum is of the usual oblong, right-angled, parallelogramatic form, with rounded corners, and is, in this respect, like the important station of Borcovicus, at Housesteads, about eight miles west of Chesters.

The ramparts at Cilurnum are, like the East Wall at Borcovicus, five feet thick, and the fosse can still in places be distinguished. There are two gateways in both the East and West Walls, and one in the North and in the South. The gates here, as at Borcovicus and elsewhere, have consisted of two portals, and each portal has been spanned by an arch or vault. The gates closing the portals have been two-leaved, and have moved upon pivots. One of the iron pivot sockets is still *in situ* at Cilurnum. At Borcovicus the stop stones for the gates and the pivot holes and the ruts in the threshold stones caused by the chariot wheels, may be clearly noticed. Similar ruts, &c., exist at the east entrance to Cilurnum, &c. On each side of the gateways at Cilurnum, and at Borcovicus, is a Guard Chamber. Cilurnum is situated across the line of the Great Roman Wall.

Most of the streets in the Camp have been passages, barely three feet wide. There have been, however, two main streets, about eighteen feet wide, crossing at right angles, and running from east to west and north to south. Near the centre of the Camp, and on the south side of the main street, running from east to west, the ruins of the Market Place or Forum may be noticed, together with its public buildings.

After passing up the steps to the north gate of the Forum, the main street led to the north gate of the Camp. There were also gates on the east and west sides of the Market Place. The Central Square (or as it were Cloister Garth) of the Market Place, into which goods were probably brought, was surrounded by a covered way or colonnade, and the gutter-stones to receive the drip from the roof are still in position. On the south side of the Market Place are the remains of the three Halls, each having a wide portal. The Central Chamber is believed to have been the aerarium of the Station, the place where the treasure chest of the regiment was kept, and where all pecuniary business connected with it was transacted. The chambers on each side of it are believed to be the curiæ, in which court martials were held and the justice of the district dispensed. At a later date a Vault was constructed for the better preservation of the treasure chest, and this Vault was entered from the original aerarium. The construction of the roof of the Vault is peculiar, being formed of arches or ribs, all flush on the under-side.

The General's Quarters or Prætorium are believed to have been the buildings situate between the Market Place and the east rampart. The whole of the remains of Roman work in the North of England are believed by the writer to indicate a military occupation of the district rather than that of a domesticated character; for example, nothing of the nature

of tessellated pavement or residential villas seem to have existed as is the case further south. The remains of concrete floors are still extant. At Cilurnum, however, the flooring of the rooms in the General's Quarters rests upon sleepers of brick and stone, and heated air was conveyed under the floors from a furnace situate at the south-east corner of these buildings. Flue tiles in the walls about the remains make it clear that the warm air was also conveyed up the walls of the rooms in order to heat them. The eastern entrance to the camp at Cilurnum was approached from the east side of the North Tyne by means of a Bridge; two of the piers upon which the wooden Bridge rested may be seen when the river is low. The third pier or abutment (on the east and opposite side of the river to the camp) is situate in a plantation some distance from the river's present edge, owing to the stream having, in the course of centuries, changed its position to the westwards. This abutment was discovered 35 years ago. It is a solid mass of large ashlar masonry, well planned, and measures about 22 ft. on the side fronting the river. The facing stones have been bound together with rods of iron run with lead. A large monolithic pillar and other remains here are believed, by Mr. Holmes, of Newcastle, to have formed part of an arrangement for lifting, out of its position, a portion of the wooden platform, or Drawbridge, crossing the, now fordable, river. Mr. Holmes' views and information as to the Bridge may be fully considered from Volume 16 of the "Archæologia Æliana" (the publication of the Newcastle Society of Antiquaries). The piers and abutments contain within them the piers of a prior Bridge. There are also the remains of a Castellum at the end of the Roman Wall where it terminates near the eastern abutment of the Bridge. The lewis holes in the stones of the latter Bridge are in a good state of preservation. The stones in both Bridges have been fastened together with iron cramps, and in the earlier Bridge the stone joints are crossed by cramps neatly let into the stones.

It is believed by the authorities that in these Bridge piers we have the remains of the work of Hadrian's time. Between the River and the Camp of Cilurnum are the remains of a range of buildings, consisting of the space or courtyard paved with rough flags and having a wall on its west side with seven recessed arches or niches facing the courtyard. The object of these niches has never (to the writer's mind) been satisfactorily explained. Near to are chambers with hypocausts and with concrete floors, one having a splayed opening or window, beneath which Dr. Bruce found some fragments of Roman glass. The Camp was entered from the Bridge by the east gateway. The Guard Chambers here are exceptionally well preserved, the masonry at one point being 12 courses high. The burial ground was to the south of the Station, near where the river turns to the east. Excavations are still being made; all removed earth is carefully examined and sifted, and every object of interest is collected for preservation in the Museum at Chesters.

After the Roman Station had been examined, Mr. Rich conducted the party over the house buildings, and explained that Chesters has been in possession of the Clayton family for about 90 years. It was originally built by the Erringtons. Some additions were made to it, chiefly in a Portico on the north side in Mr. Dobson's time. The present owner, Mr. N. G. Clayton, has had extensive alterations made. The old Mansion House has been really gutted and nearly rebuilt, and forms a very small portion of the Mansion of to-day. It is built of stone throughout from the neighbouring quarries, is lighted by electric light, generated by Mr. Clayton's own installation, and is supplied with water from a never failing spring about three miles away. Mr. Clayton has built a Museum near the Entrance Lodge, in which to store all the objects of antiquity. New stables have been built a short distance from the house with all the modern improvements. A new carriage drive is also being made, with Entrance Lodge and gates. The contractors for the work have been Mr. Walter Scott, of Newcastle; Messrs. Middlemiss Bros., for builders and joiners' work; Mr. Civil, of Hexham, for part joiners' work; Messrs. Watson and Sons,

Newcastle, for plumbers' work and heating; Mr. Smith, of Hexham, for part plumbers' work; Mr. Baty, of North Tyne and Mr. Charlton, of Stamfordham, for tiling and slating; Messrs. Wilkinson and Co., for plasterers' work; Mr. Ellis, of Hexham, for painting and glazing; and Messrs. Musgrave and Co., for stable fittings.

The Mansion has been carried out from the designs of Mr. Norman Shaw, and the rest of the works in Museum, Entrance Lodge, Gates, Stables, &c., from designs by Mr. Frank W. Rich, of Newcastle-on-Tyne.

THE TEUFELSMAUER INFERIOR TO HADRIAN'S WALL.

THE Teufelsmauer, a wall 120 miles long, which crosses Württemberg and Bavaria, is a part of the great frontier work which formed the *limes* of the Roman Empire between the lower Rhine near Bonn and the Danube near Regensburg. Two-thirds of this great work consists of an earthen rampart and a ditch, called Pfahlgraben, which forms the frontier of the province of Germania Superior; the rest is a stone wall without a ditch, behind which lay Raetia and the upper waters of the Danube, and this is the Teufelsmauer. For the last three years a Commission, established and endowed by the German Government, has been busy examining the 360 miles of this long boundary, and the seventy or eighty Castles which compelled the barbarian to respect it. An able soldier and a well-known archæologist are "directors" of the undertaking, while the excavations are personally supervised by volunteers who, however, are not mere amateurs. The actual course of operations may be best illustrated by an instance. Mr. William Kohl, of Weissenburg, in Bavaria, has under his care the examination of the Teufelsmauer for some 50 kilometres—about 30 miles—and has also helped to dig out two Roman Forts. The Forts are at Weissenburg itself and at Dambach. The latter lies close to the Teufelsmauer; the former resembles most of the Forts on the Retian frontier in being several kilometres to the south of it. Any visitor to Weissenburg may see it; it stands close to the Railway Station and the *praetorium* or headquarters, and three of its gates have been left uncovered for future students to admire. It is of the usual shape, rectangular with rounded corners and corner turrets, measuring about 570 ft. by 530 ft. The interior has not been fully excavated; but it appears, like most of the *limes* Forts, to have contained fewer stone buildings than the Forts on our English Wall of Hadrian. It resembles rather such a Fort as Hardknott, recently excavated by the Cumberland Antiquarian Society, and it is perhaps more than a coincidence that the scanty evidence surviving seems to ascribe both the Raetic *limes* and Hardknott to the middle of the second century of our era—that is, to the reigns of Pius or Marcus Aurelius. The Fort at Weissenburg can hardly, if this be so, have been occupied more than a hundred years, for the coins found in it end with the middle of the third century. Despite this, the smaller objects discovered in the excavations, and now preserved in the local Museum, are by no means contemptible. They would make a good show in any but three or four towns in England, and emphasise to the English visitor the weakness of our Romano-British civilisation. The Teufelsmauer itself lies three or four miles to the north of Weissenburg, sometimes moderately preserved, sometimes traceable only by hedges or field boundaries, and not seldom wholly destroyed. There is, however, a long stretch in the immediate neighbourhood of Weissenburg which is interesting enough. The Wall runs fairly straight across the country, keeping, as a rule, to the high ground, but declining no steep ascent or descent, and occasionally taking a course which is commanded from the outside; it was plainly a frontier barrier, but not a military defence. Where unexcavated it is a mere mound of stones lying idly one on the other, but the spade has revealed something different inside. We have, that is, a solid and tolerably well constructed wall, four feet thick, built with mortar and with stones in somewhat irregular courses, and buttressed at intervals of ten to fifteen yards. The Teufelsmauer is far inferior to Hadrian's Wall as a piece of building, but it is none the less a real wall. At suitable spots

Towers are built into it, measuring usually about twelve by fourteen feet inside, and presenting the curious feature that they are hardly ever bonded into its masonry. Clearly they were built before the Wall, but it would be rash to say how much earlier. Perhaps those who erected the Wall found it convenient to put up these Towers first, like the Bridges on a railway, and then join them by the Wall. Perhaps the Towers belong to an earlier date, when Forts and Towers existed alone, as they seem to have done in the Odenwald during one period of Roman rule in Germany. Altogether there is much to see on the *limes*. Mr. Kohl's section is but one of several, and an archaeological tourist might profitably and pleasantly visit a dozen other districts. The *limes*, too, is singularly accessible, and its neighbourhood is often attractive for wholly un-Roman reasons. The splendid stretch of earthwork on the Taunus Hills, with the excellently preserved Forts at the Saalburg and Feldberg, is in the midst of forests and yet close to Wiesbaden, Homburg, and Naheim. There is a good piece further north, near Ems, and the archaeologist may be also an *habitué* of watering-places. In Würtemberg and Bavaria you wander through quaint old-fashioned towns with picturesque walls and stately Towers.

THE engineers of the Snowdon Railway have decided to construct it on lines similar to the latest Swiss Mountain Railways. The gauge will be 2 ft. 7½ in., and the sharpest curves will have a radius of four chains. The length of the line will be 4½ miles, and Terminal Stations will be erected at Llanberis and the summit. The locomotives are being manufactured in Winterthur, Switzerland.

ON Saturday week the Foundation Stone of the Church enlargement in connection with Holy Trinity Church, Shoreditch, was laid by Lady Howard de Walden. The Church, which was built in 1887, was some little time ago found to be too small, and a piece of ground adjacent was purchased, and an extension made to the western end at a cost of £1,000.

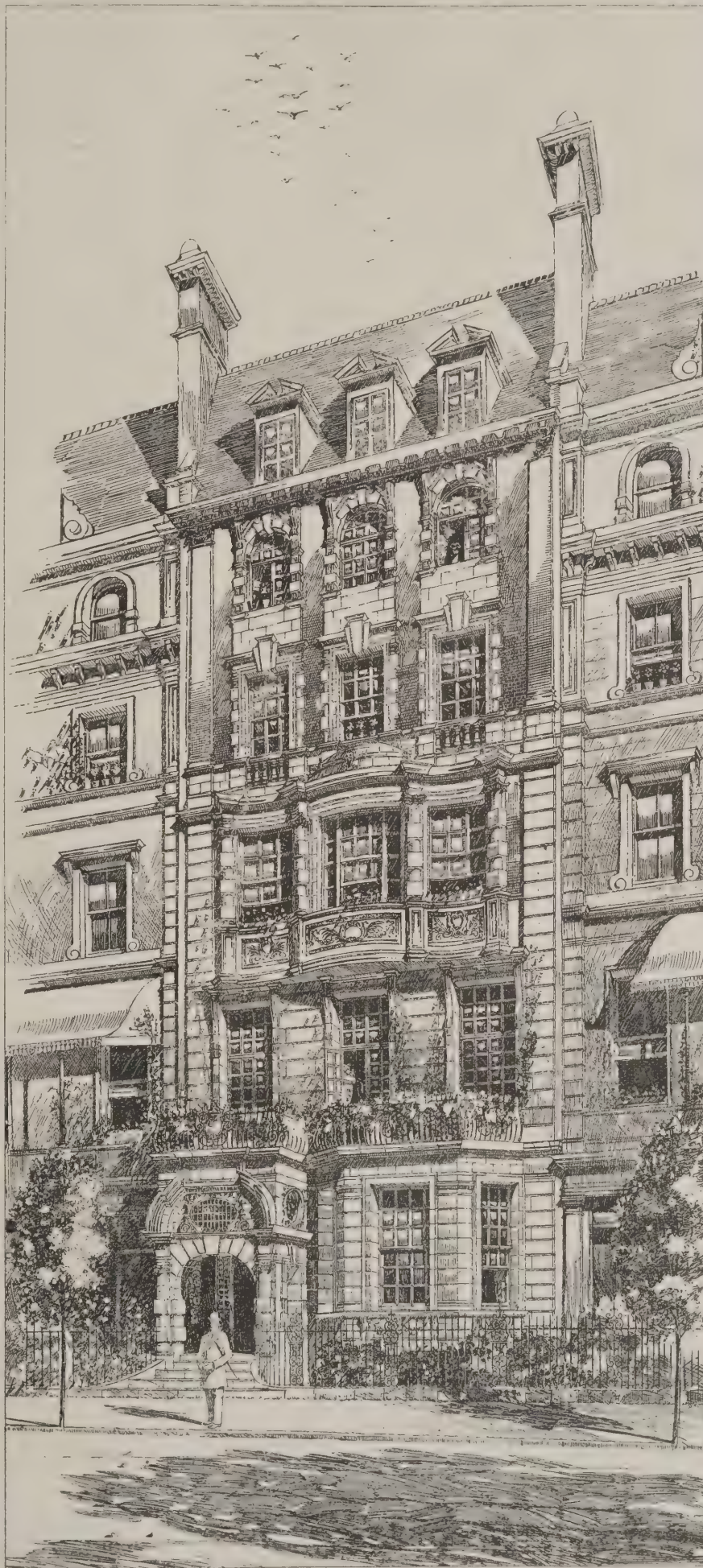
It is to be regretted that the movement to acquire the Riverbank Estate at Putney for the purposes of a Public Recreation Ground is not progressing as it ought, and unless some decided local feeling is evinced sufficiently strong to induce the local authority to contribute towards the comparatively small sum required, it will fall through.

A NEW Wesleyan Reform Union Chapel has been opened at Mexborough, having been erected at a cost of £2,200.

THE WALL DECORATION OF MEDIAEVAL CHURCHES.

NO one supposes that all the mediæval Churches were decorated in gold and colours, like the Sainte Chapelle of Paris or St. Stephen's at Westminster. Yet they were painted, and in this manner:—The rubble of the walls was dubbed out to a plain surface; the angle jambs of windows and doors were made of stone, because that was the best and most durable material for the purpose. The whole of the walls were then covered with a coating of gesso (whiting and size) one-eighth of an inch thick, which was gradually thinned off as it approached the stone jambs, which were covered with only a thin coating of it, so that it did not show as stone. Upon this gesso the artist painted his subjects with a red outline, and shaded them up with black and red and yellow, using white for the high lights. It should be remembered that these colours were not used pure except in little bits, but were broken up with white and with one another. The seas of diaper we see in modern Churches were unknown to the old artist, who when he did employ diaper did so only as a background or to fill up a space unoccupied with anything more important. Nearly every Church in the thirteenth century was decorated in this manner; they were whitewashed in the reigns of Edward VI. and Elizabeth, and have, in the vast majority of instances, only been brought to light to ensure their more speedy destruction from the church restorer. The interior of a modern Church, on the contrary, is neatly plastered with plaster, one inch or three-quarters of an inch thick, which stops flush with the stone quoins, which are left uncovered because the Architect has been brought up to consider stone as a beautiful material for its own sake; in fact, just the same as an Italian would regard marble. The consequence is that we see every piece of stone a distinct colour from the plaster, and all the lines of the Architecture become jagged and uneven.

THE Right Hon. A. Akers-Douglas, First Commissioner of Works, has, during the past few days, been on an official visit to Edinburgh. Accompanied by Mr. W. W. Robertson, Surveyor of Works, he inspected the following buildings in charge of his Department: Holyrood Palace, the Royal Observatory, the General Post Office, the Museum of Science and Art, the Royal Botanic Garden, &c.



A HOUSE IN QUEEN'S GATE : R. A. BRIGGS, ARCHITECT.

HOW ANCIENT JERUSALEM WAS DISCOVERED.

BENEATH FEET OF MODERN RUBBISH.

THE fact that modern Jerusalem stands on many feet of rubbish was demonstrated by Captain Wilson—now Major-General Sir Charles W. Wilson; and the work of exploration was commenced in 1868 by Major-General Sir Charles Warren—then holding the rank of lieutenant—and an efficient staff of non-commissioned officers of the Royal Engineers. In November of that year, a shaft was sunk near the south-east angle of the Temple area, and tunnels driven in the direction of the wall. Great personal danger was incurred, for the loose shingle ran like water when disturbed, and stout wooden frames had to be provided to line the shafts and tunnels. Characters in red paint were found on the lower stones of the wall—some of which were of immense size—and these marks were shown to have been made by the Phœnician masons employed by Solomon, before the stones were set in their places, probably as they were finished at the quarry. The solid rock was struck at the depth of no less than 79 feet 3 inches below the present surface level, and the great corner foundation stone, 3 feet 8 inches high and 14 feet long, was seen and examined; while in a recess cut in the rock was found a small jar or vase, probably used for holding the oil employed in the ceremony of laying the stone, for we know that the Jews bestowed great care on the corner-stones of their buildings, and the dedication of Solomon's Temple was celebrated by a festival of especial grandeur. There can be little doubt that the Temple, like the Tabernacle and all its furniture, would be consecrated by being anointed with the holy oil. The immense artificial platform on which Solomon's Temple and its successors were built is an irregular oblong, about 1,600 feet long, and 1,000 feet wide, with an area of thirty-five acres. Its western wall in ancient times abutted on the slope of the Tyropœan valley separating the two hills. On the other side of the valley rose the slope of Zion, surmounted by the Palaces of the Kings of Judah, and in later times by the Palace of Herod; and the hills were connected by Bridges, one being known as the Zion Bridge, forming a communication between the Temple precincts and the Palace Hill. Many years before any excavations were made, Dr. Robinson, the eminent American traveller, had noticed, near the south-west angle of the Temple platform, certain projecting stones in the wall, which had unmistakably the appearance of the spring of an arch. It was reserved for Sir Charles Warren, not only to prove the truth of this surmise, but to discover the original level of the valley spanned by the Bridge. The Royal Engineers, under Warren's direction, made a careful survey of the projecting blocks, which extend along the wall for 50 feet, and the span of the arch having been calculated from the curve of the stones, a shaft was sunk about 40 feet from the wall. After digging to a considerable depth they came upon the remains of the actual pier which supported the arch, 12 feet thick and 50 feet long. On a level with the base of the pier was the stone pavement of the ancient street leading along the Tyropœan valley, and lying on this pavement, between the pier and the wall, were the fallen stones or voussoirs of the arch. However, the explorers did not stop here. They broke through this pavement, and digging still deeper a canal or aqueduct was found, together with arch stones belonging to an arch older than the first. Several lamps, weights, and jars were also brought to light, and this at a depth of 45 feet below the present surface. To quote the words of Sir Walter Besant, "It was Warren who restored the ancient City to the World; he it was who stripped the rubbish from the rocks, and showed the glorious Temple standing within its walls, 1,000 feet long and 200 feet high, of mighty masonry; he it was who laid open the valleys, now covered up and hidden; he who opened the secret passages, the ancient aqueducts, the Bridge connecting Temple and town. Whatever else may be done in the future, his name will always be associated with the Holy City which he first discovered." The future has passed into the present. What has been done at Jerusalem since Warren's time?

Practically nothing, if we except such limited work as could be carried on within English territory, as, for example, the tracing of the rock-scarp of Zion in the property of the English School and Cemetery by Mr. Maudslay; or the interesting items of news furnished from time to time by Herr Schick, the Jerusalem Architect.

Early in this year letters were received both from Dr. Bliss and Herr von Schick, reporting the discovery of a Latin inscription at the Cœnaculum, near the Zion Gate. The stone inscribed is built into the wall, and is a votive tablet to Jupiter on behalf of the welfare and greatness of the Emperor Trajan and the Roman people, erected by the Third Legion, which takes us back to the interval between the destruction by Titus and the founding of Cœlia Capitolina.

A DAY IN A CISTERCIAN ABBEY.

MR. MICKLETHWAITE'S ATTEMPT TO PORTRAY THE MONASTIC ROUND.

"A CISTERCIAN Day," in which an attempt was made to picture the ordinary life in a Cistercian Abbey, was the title of a Paper read by Mr. J. T. Micklethwaite, before members of the Royal Archaeological Institute at Scarborough. The great body of the monks, he said, were laymen in the modern sense of the word—that was to say, they were not in Holy Orders. They had priests amongst them to minister to them in spiritual things, just as the secular clergy did to men living in the World, but it was characteristic of the specially monastic services that they might go on without even the presence of ordained clergy. The abbot and a small number of officers under him managed the common property and ruled the house, and where the family consisted, as it often did, of some hundreds of persons, the burden could not have been a light one. Any monk was bound to undertake an office if the abbot imposed it on him. The office of cook was the only one which was laid equally on all in turn. The day and the night were each divided into twelve hours, but they were not of constant length, such as we, whose time is regulated by mechanical clocks, are accustomed to understand by the word. The first duty of the monks was to keep up the regular daily round of services, the *opus Dei*, as they called it, and nothing was allowed to stand in the way of it. At harvest tide, when all joined in the in-gathering of the crops, and at other times when monks were at work so far from the Church as to make the journeys to and fro inconvenient, they might say the offices in the field where they were. The office of the night was that now known as matins; but the Cistercians, using in this, as they did in other matters, the language of St. Benedict, called it vigils. In the winter half of the year, which was reckoned to be from the 1st of November till Easter Day, they rose for vigils at the eighth hour of the night, that was about two o'clock a.m., except on feasts of twelve lessons and a few other days. The office for the dead followed, and after that vigils as the case might be. Such time as remained before dawn was filled up with meditation or reading, lights being placed in the Cloister by the bookcase, and in the Chapter-House, for the convenience of readers. At dawn, on the sign being given by the abbot, the sacrist rang the bell for the return to the Church, and the short office now called lauds, and by the monks matins, was sung. In the other half of the year the hour of rising was so arranged that there should always be a short interval between vigils and matins, which were to be said at daybreak. The service of vigils was somewhat shortened in summer, and the office for the dead was said after evensong, but even then the time of rest was so reduced that to make it up a mid-day sleep or *meridien* was allowed. The reader and those who had served at table dined after the others, but to all those who, by reason of their serving, had to dine thus late, an extra allowance was given on all days except the week days in Lent—and certain other days. In summer, to make up for their want of sleep in the short nights, the monks slept for an hour after dinner. After nones, if there was no supper, they went into the grates, where those

who would might drink. After supper, on supper days, or after evensong at other times, all the monks assembled together in the Cloister, and one of them read aloud either from the Bible or from some other book thought to be edifying. This reading was called collation, a word which had in recent times come to be used as a newspaper term for a cold lunch. After collation all the monks went together to the Church and sang compline, which was the last service of the day, and then went to bed. Such was the ordinary life of the monks, varied only by the season of the year and the alternation of feast and work day. When, from old age or infirmity, the monk could no longer take his part with his brethren, he withdrew from the Cloister to the Infirmary, though still keeping, or being expected to keep, the rule in the spirit. The soul of the dying monk was sped on its way with much solemnity. When the last moment came the dying man was laid upon the floor, where ashes had been strewn in the form of a cross. This was a practice not peculiar to Cistercians or even monks. The abbot himself administered the last sacraments, and the monk died with his brethren praying round him. After mass the body was buried, and for 30 days a special memory of the deceased was kept in Church and in Chapter. His name was entered in the book and read out in Chapter year by year, and at every meal a share of the food was set apart and given to the poor, whose prayers were expected in return. The life of the lay brethren whilst in the abbey was not very different from that of the monks, except that their want of letters made it impossible for them to take their part in the services. The lay brothers worked for the benefit and profit of their house in all sorts of useful crafts, but such as ministered to luxury was forbidden. They were to observe silence generally, smiths only being allowed to speak in their workshops. Other trades had "parlours" outside their shops where necessary talking might be done.

THE Foundation Stone of a new Infant School in connection with St. Mary's Church, Ulverston, has been laid by the Duchess of Devonshire. The School, which will cost £1,800, most of which was raised from the proceeds of a bazaar held in Jubilee year, is built on the site of the old playground, in order to afford additional accommodation required by the regulations of the Department.

SOME interesting pieces of porcelain, collected from various private sources, have been sold at Christie's. The following prices were realised:—A pair of vases, with pierced necks, each painted with birds, 80 guineas; a square-shaped Limoges enamel plaque, with the History of Troya, 85 guineas; an oblong plaque of Limoges enamel, with the Espousal of the Virgin Mary, 90 guineas; a pair of Louis XVI. mottled marble vases, with handles and feet of chased ormolu, 91 guineas; a silver-gilt ewer, the handle formed as a terminal female figure, 72 guineas; a life-size bust of a saint, silver parcel-gilt, 191 guineas.

BALCOMBE is having its share in improvements. The Railway Station has been largely improved, and a Passenger Bridge across the line provided. The Parish Council appears to be anxious to provide a Village Reading Room, and this seems a possible institution in the near future, although a suggested expenditure of £800 on what would be practically a Public Hall, was not at all warmly received at the recent Parish Meeting. Public Halls are certainly not yet wanted in Balcombe, but a comfortable Reading Room and Recreation Room would no doubt be much appreciated.

THE Margate Town Council, at a special meeting held on Tuesday last, decided to offer £2,500 to Messrs. Lewis for a slip of land 100 feet deep, forming part of their Cliftonville estate, so as to widen the popular promenade to the east of the town, leading from the Fort to Hodge's Flagstaff. The question has provoked considerable interest for several months.

It has been estimated that the cost of a Pullman carriage is from £2,000 to £3,500; of an ordinary first-class carriage, £550 to £700; second, £450 to £600; third, £350 to £450; of a coal waggon carrying eight tons, £60 to £70; a waggon carrying ten tons, £70 to £90.

THE CHAPEL OF A MILANESE BASILICA.

INTERESTING MODEL IN EDINBURGH MUSEUM.

THE Chapel of St. Peter Martyr, contained in the Church of St. Eustorgio, Milan, discovered twenty years ago, is now a thing of interest to Architects and decorators. Its exhumation is so recent an event that it is still almost unknown. Until a year or two ago no writers on Painting or Architecture had described it, and it is figured in none of the text books. It is, therefore, fortunate that the model of the Chapel, which has now been placed in the Edinburgh Museum of Science and Art, is on a scale admitting of an exact reproduction of all its details of moulding and ornament and sculpture. This work, which has been executed by Signor Adolfo Consolani, could scarcely have been better done, and the frescoes with their figure subjects have been so skilfully copied by Signor Catani, of Sienna, that the spectator easily forgets that the whole thing is only one-tenth of the size of the original. The Church of Sant Eustorgio, to which the St. Peter Martyr Chapel appertains, is one of the oldest and most renowned of the Milanese basilicas. Founded as early as the fourth century, it had become famous in the eleventh century as the repository of the relics of the Magi, said to have been brought from the distant east by the Empress Helena. Its fame, however, suffered a temporary eclipse when Frederic Barbarossa, after plundering Milan, carried off these much envied relics to Cologne, leaving behind only the sarcophagus in which they had been preserved. But the Church began to gain reputation anew when in 1227 it came into the hands of the Dominicans; and the violent death of one of their number, Friar Peter of Verona, and his burial within its walls, restored to it even more than its former greatness. Milanese nobles and their families, and wealthy worshippers, built those Chapels which now so picturesquely break the line of its southern wall. Of these Chapels that of St. Peter Martyr is at once the largest and the most interesting.

The gift of Pigello Portinari, a Florentine noble and agent of Cosimo de Medici at Milan, this beautiful little Chapel was erected in 1462 by Michelozzo Michelozzi, an Architect of Florence. The building is rectangular, and nearly square in plan. The Chapel proper, which measures little more than 40 ft. each way, may be likened in its general form to that of a cube drawn in at the top corners by a circular band or wall, and surmounted by a cupola. Opening from it is another, but much smaller cubical-shaped chamber, also with a domed roof. This forms an inner Chapel, in which the Altar is placed. The four walls of the principal part are finished by a frieze of cherubs, and are surmounted by arches which span the whole breadth of the wall. Under one of these arches the visitor enters from Sant Eustorgio, and passes beneath another to reach the inner Chapel. The spans on each side are pierced by Gothic windows, the remaining spaces being filled with frescoes illustrating incidents in the life of St. Peter Martyr. The Fathers of the Church are painted within medallions on the pendentives which spring from the corners of the building to support the "drum," on which a beautiful frieze, in high relief, representing a dance of angels, has been sculptured by Michelozzo. From the drum rises the cupola, ribbed in radiating sections, and painted in tones which graduate from red, through amber yellows, to the blue of the upper vault. At the base of the cupola are sixteen lunettes, eight of which are opened by circular windows, others being filled by medallions with painted heads of apostles. Over all is an elegant open-columned lantern with a small surmounting cupola; and four rectangular Towers, rising from the outside corners of the building, complete the construction. Every part of the interior is treated with colour, but some uncertainty still surrounds the identity of the artists. That Vincenzo Civerchio and Vincenzo Foppa both had a share in the work seems certain. They were the leading frescoists of the day, and it is probable that the whole of the painted decoration is from their hands. Facing the entrance over the opening to the smaller Chapel is the large picture of the

Annunciation, treated after the conventional fashion, and with elaborate Architectural background; and on the sidewalls are depicted incidents in the life of the Saint. The tone of the whole colouring of the Chapel is pleasant and harmonious. The dainty treatment of the moving drapery in the Dance of Angels is as happy in its colour as in its form, and the frescoes, apart from their more important interests, afford excellent studies of fifteenth century costume. The seventeenth century brought only misfortune to the Chapel. The taste of the day was no longer that of the "golden 1500." The decorations were too simple, the pictures too tame. They were no longer pleasing to the crowds of fashionable visitors who found comfort within its walls. And so Padre Cuccino "restored and embellished" the Chapel. The frescoes were covered with whitewash, and other scenes were painted in their place; the ornamental carvings were hidden beneath more florid forms in plaster; additions were made to the Altar; and the worthy Father, lest his good deed should be forgotten, had it recorded on the walls, and presented to the Chapel two candlesticks, on which he had inscribed his name, office and date. Thus a highly interesting example of fifteenth century Art was hidden from the World till twenty years ago, when, fortunately, all Padre Cuccino's "restorations" were removed, and no trace left of him except the record of his misapplied zeal, and the two candlesticks, which remain to show his name and date.

ROMAN CARPENTRY.

THE arch not only superseded the use of long tone beams, but it was constantly used in places where indeed joists of wood would have been much more convenient, giving support to the opinion that even the Romans were not skilled in the application of timber to their edifices, though, on the contrary, it is difficult to understand how Rome could become subject to such dreadful conflagrations as that which occurred in the reign of Nero if timber had not been employed in the ordinary houses of the city to a much greater extent than would appear from existing remains. The domestic structures of Herculaneum and Pompeii were evidently never very susceptible of fire from the small quantity of timber required in their construction; and discoveries which are made from time to time of portions of the ordinary houses of ancient Rome under the pavements of the modern city evince that they were very similar to them in almost every particular. The infrequency of stairs, and the meanness of those which exist leading to upper apartments in the houses of those cities, leads to the belief that the Romans seldom built above the ground story, and that their skill in carpentry was not very great, otherwise they would more frequently have had recourse to so easy and convenient a mode of extending room as upper stories offer. There are, however, other things which tend to prove that carpentry was well understood by the Romans, and the most remarkable is the Bridge that Trajan built over the Danube, the piers of which are said by Dion Cassius to have been 150 feet high and 170 feet apart. Now, whether the Bridge itself consisted of a wooden platform, as there is much reason to believe, or was of stone arches, as the historian intimates, the skill which constructed centreing for the latter, or laid the platform from pier to pier in the former case, of that immense extent, was amazing. Nevertheless such skill in carpentry is not evinced by the remains of the civic and domestic structures of the Romans, in which arching in all its variety was used where carpentry would have been better. Of their joinery we know nothing, but it does not appear to have been much practised by them, mosaic pavements supplying the place of flooring, and stucco that of wainscoting; the luxury of windows being unknown, their fittings were not required, and doors, it would appear, were uncommon, except externally, the internal doorways being probably covered with something equivalent to the quilted leather mats suspended from the lintel, which are used instead of swinging doors at the entrance of the Churches in Italy at the present time.

DOMESTIC ARCHITECTURE IN THE MIDLANDS.

AN INSTRUCTIVE ARCHÆOLOGICAL EXCURSION.

MEMBERS of the Birmingham and Midland Institute, Archæological Section, visited Bolsover and Barlborough on Wednesday. A drive of seven miles through a hilly country, dotted over with collieries and election posters, brought the party up a very steep hill to Bolsover, where the party had the permission of Mr. Turner to inspect the Castle. The ancient Norman Castle, at that time in ruins, was granted (temp. Elizabeth) to the Earl of Shrewsbury, husband of Bess of Hardwicke. This lady got it settled on her second son, Sir Charles Cavendish, and built a new house on the foundations of the Norman Keep. The Architect, Robert Smithson, part Architect of Woollaton, seems to have been dominated by the Castle idea, and the house lacks the freedom of design and comfort of many houses of the period. It is now unfurnished, and its most noticeable features are an unusual number of stone and marble chimney-pieces, all projecting like muffles. Several rooms are vaulted like cloisters, and there are in a room, called the Star Chamber, oil paintings of the twelve Cæsars, said to be copies of those in the Star Chamber at Westminster (temp. Charles I.) In the front court are two very elegant iron lamp-brackets, noteworthy as examples of Jacobean ironwork. The house is approached by a handsome flight of steps, and there are terra cotta figures of Hercules and Atlas over the two doorways. Adjoining are the roofless and ivied ruins of a noble building in the style of Inigo Jones, built by a succeeding Cavendish, Duke of Newcastle, for the entertainment of company, and here Charles I. was received by him, and a masque by Ben Jonson performed. Near this is the picturesque Riding School, renowned in the annals of horsemanship. For three generations the estate passed through heiresses, at length resting with the Bentincks (Cavendish Bentincks), and the roofs were dismantled to enrich Welbeck. After a visit to the Church, containing a rare stone carving of the Nativity (15th Century) and two magnificent Cavendish monuments, in an absurdly small Chapel, a pleasant drive past fields of strawberries and of raspberries on the hill top brought the party to Barlborough Park with its old trees and famous avenue. By the permission of Miss De Rodes and by the kindness of Mr. J. Dolling Bolton, the fine Elizabethan house was opened for inspection. This is a house of moderate size, built around a small well or courtyard. The original entrance, facing the avenue, was up an impressive flight of steps to the Dining Hall, but a more convenient entrance has been made at the side through a pretty Conservatory, and the well, covered by a sky-light, gives room for a convenient staircase. Here were seen carved and marqueterie furniture, tapestries, family pictures, fine mantelpieces and fine iron gates.

OVER 70 years ago Joseph Dudley, of Waterford, Maine, conceived the idea of putting a large clock outside his house over the entrance to the place. For that length of time the clock has been running regularly with the original works in it. Neither the rain nor the snow has ever stopped it.

MR. R. H. AMPHLETT, one of the justices at County Petty Sessions, recently called the attention of the chairman (Sir H. F. Vernon) and the clerk to the lack of accommodation at the Droitwich Court, which he characterised as the worst in the country. The magistrates had no retiring room, except through the courtesy of the Borough Treasurer; there was no accommodation for witnesses, the police, members of the Bar, &c. The cells were more like coalholes, and not suitable for the present age. Sir Henry Vernon remarked that at the present time the Standing Joint Committee were trying to keep the rates down, and if new buildings were erected the expenditure would increase. He thought the cells were suitable, and would bear favourable comparison. The Clerk said that as Mayor he would bring the matter before the Town Council.

Professional Items.

BIRMINGHAM.—Plans are being prepared by Messrs. Crouch & Butler, Architects, Waterloo Street, for a large block of buildings in Corporation Street, to be erected for the purpose of a furniture manufactory. The cost of the buildings will be about £10,000.

BLACKPOOL.—The Corporation has accepted the tender of Mr. Robert Finnigan, of Northampton, for £64,870, for the construction of Sea Defence Works at the North Shore, for the Corporation. The plans are by J. Wolstenholme, Borough Engineer.

BLACKPOOL.—Mr. Walton held an inquiry on Tuesday into the application of the Corporation to borrow £33,769 for Public Street Improvements and Sewerage Works, £12,750 for Police Station, £12,000 for Municipal Buildings, £4,989 for Private Street Improvements—a total of £63,508.

BRISTOL.—The Town Council is still considering the desirability of building new Markets. Plans have been prepared showing the properties that must be acquired and the streets which would have to be made around the Markets, if they were built on the Queen Street (Castle Street) site. The Markets would be in two blocks—one in Queen Street and the other facing the National Schools in Marybush Lane.

BURNLEY.—The new Workhouse Hospitals, which are being erected from the designs and under the superintendence of Mr. G. Keighley, Architect, of Burnley, are nearing completion. They are being warmed and ventilated throughout by means of Shorland's double fronted patent Manchester stoves.

CHORLEY-CUM-HARDY.—The Corner Stone of the new South Transept of St. Clement's Church, was laid recently with Masonic rites. The Church itself, which replaced a very ancient structure, was built some thirty-five years ago. A North Transept was afterwards added, and the addition is a replica of it. It will provide accommodation for something over one hundred worshippers, and will cost to complete about £1,500. Of that amount £1,000 has been subscribed. The Architects are Messrs. W. and G. Higginbottom, St. Ann's Street, Manchester.

CRANBROOK.—For the construction of new Waterworks to supply the districts of Cranbrook, Hawkhurst and Goudhurst, tenders will shortly be invited. The works will comprise an Artesian Well, Pumping Station, Reservoir, and Distributing Pipes. The Pumping Station is to be on the high ground near Cranbrook Union, about 2½ miles from the well. The designs are being prepared by Mr. E. P. Seaton, of Prince's Street, Westminster.

DERBY.—Colonel Walter M. Ducat, R.E., held an enquiry at the Guildhall, Derby, on Wednesday, in respect to certain loans applied for by the Corporation of Derby under the Public Health and Electric Lighting Acts. They included the borrowing of £13,000 for Electric Lighting purposes, £8,595 for providing a Recreation Ground, £1,095 for the purchase of property for Street Improvement, and £943 for Sewerage Work and other purposes.

EDINBURGH.—Mr. Hill, Engineer of the Manchester Waterworks, has been appointed to advise as to the construction of the embankment and works for the new Reservoir on the Talla, in order to secure that it shall be sufficiently strong for the public safety.

GOLCAR, YORKS.—At the monthly meeting of the Golcar School Board held recently, it was decided to build new Schools in Royd Street, to accommodate 400 children. Mr. J. Berry, 9, Queen Street, Huddersfield, was appointed Architect.

GRINDELWALD.—The new Anglican Church here was opened on Thursday. The present building has been erected on the site of the first Church (destroyed by the great fire of 1892), which was built by the late Canon Butler. His

friends have presented the new Church with a Pulpit and Reredos in his memory. The cost of the rest of the fabric has been defrayed by the Colonial and Continental Church Society.

HORSFORTH.—The Foundation Stone of a new Vestry for the New Connexion Chapel in Bachelor Lane, was laid on Saturday by Mr. R. Cockroft, of Bradford. In addition to this new Vestry there are to be several structural alterations in other parts of the Chapel, plans for which have been drawn by Mr. W. Walter, and the estimated cost of the whole is about £300.

ILFORD.—Messrs. Christy, Cropper, and Wollard have been asked to prepare designs for an Infectious Diseases Hospital, which is to be erected by the Urban District Council.

KIRKCALDY.—From plans by Messrs. Dunn and Findlay, of George Street, Edinburgh, new Halls, &c., to be called the Beveridge Hall and Library, and Adam Smith Hall, are to be built at Kirkcaldy, N.B.

LIVERPOOL.—At the Consistory Court, held on Tuesday, permission was granted to build a Tower in the South Transept of St. Paul's, Widnes, up to the level of the Church roof, and to construct an Organ Chamber, with Organ, in the Tower. The cost of the projected work is £1,700, for which £1,300 is already subscribed. The cost of completing the Tower will be £1,000 additional.

LIVERPOOL.—An enquiry is to be held at the Municipal Offices with regard to the application of the City Council for sanction to borrow £35,000 for the erection of a new Central Fire Station and Police Buildings. It is also proposed to erect new Church Schools at Halebank at a cost of £2,500.

MACCLESFIELD.—A new Wesleyan Chapel is being erected at Kerridge, at a cost of £1,123, by Mr. J. Clayton, builder of Macclesfield, from plans by Mr. E. Jones, Architect, of Hanley.

MERTHYR TYDFIL.—Mr. P. R. A. Willoughby, Engineer and Surveyor, has been selected from 83 applicants for the post of Assistant Surveyor to the Merthyr Tydfil District Council.

OBAN.—Operations in connection with the proposed Tower on the hill above Battery Terrace have already begun. The building, which is to cost about £6,000, is to be handed over by Mr. J. Stuart-M'Craig, banker in Oban, as a gift to the town. The design is also to include space for a Museum, but it is considered by many that the placing of such a desirable institution as this latter on the top of a high hill would be somewhat of a mistake.

PENRITH.—At a meeting of the Penrith Rural District Council, held on Tuesday last, Mr. Jackson's tender was accepted for the Ousby Waterworks, which have been designed by Mr. E. A. Sandford Fawcett, of 1, Victoria Street, Westminster. It was also decided to apply to the Local Government Board for a loan to carry out the Melinerby Waterworks, for which Mr. Fawcett is also the engineer.

RICHMOND, SURREY.—On Wednesday afternoon the Foundation Stone of the Technical Institute and Secondary School now being built in Selwyn Avenue, Richmond, was laid by the Duke of Cambridge. The premises will cost, when completed, £6,467. The portion now being erected will cost £4,626, towards which the Richmond Town Council contributes £1,250, and the Department of Science and Art £650, leaving the balance to be obtained from the County Council and subscriptions. Chemical and Physical Laboratories, a School of Art, Class Rooms for Carpentry, Carving and Plumbing are all included in the portion now to be erected. This will be one of a series of new technical buildings erected or being erected by the County Council in the seven principal towns of the county, at a cost of over £20,000, supplemented by votes of nearly £6,000 from local rates or subscriptions. Messrs. Fryer & Barr, of Queen Anne's Mansions, Westminster, were the Architects.

SKIPTON.—The Water Street Wesleyan Chapel has just undergone considerable improvements in the erection of a fine Organ by Messrs. Harrison and Harrison, of Durham, the enlargement of the Choir Gallery, the introduction of a Rostrum, and the thorough renovation of the entire building. The cost has been about £700.

TORQUAY.—The Promenade Pier was formally opened on Tuesday by the Mayor. It is constructed partly upon the inner arm of a concrete groyne and partly upon timber piles screwed into the sea bed. The total length is 930 feet. The width of the first 750 feet is 30 feet, but it then widens out to 60 feet. The decking, which is of close-jointed pitch-pine, rests upon cross and longitudinal latticed iron girders. Ornamental seating runs the whole length of the structure on both sides, and the Pier is lighted with 56 gas lamps. At the outer extremity are three landing stages for steamers—one each for high, medium, and low tides. A broad flight of steps leads from the Pier on to the outer arm of the groyne, which is available to promenaders. The Pier is approached from the Princess Gardens by means of a curved inclined deck. The contract (£9,971) has been carried out by Mr. Alfred Thorne, of London. The Pier was designed by Mr. H. A. Garrett, borough surveyor.

TRENT.—For a considerable period there had been a general outcry with regard to the insufficient accommodation at the old and time-worn structure on the Trent side, and eventually the members of the Public Baths Committee of the Corporation succeeded in inducing the Town Council to sanction the expenditure of about £1,000 on the rebuilding of the Baths. The work has been excellently carried out by the contractors, Messrs. W. H. Raynor & Sons, who have been engaged since February last in the task. The new structure, which was formally opened on Thursday, has a framing of wrought iron and a roof of corrugated iron. There are two concrete platforms, one a little higher than the other. On the whole, the improvement upon the old building is distinguishable in many respects. Mr. A. Brown, borough engineer, is responsible for the carrying out of the work.

WAKEFIELD.—On Wednesday was dedicated a new Vestry and Chapel, which have been erected in connection with Sandal Parish Church, near Wakefield. The new structure, which is substantial and commodious, has been built by Messrs. Denholme and Co., contractors, Wakefield.

WATFORD, HERTS.—At a meeting of the Watford School Board, held on the 22nd inst., designs in competition for the new Fearnley Street Schools were fully examined, when that submitted by Mr. C. P. Ayres, Architect, of Watford, was selected. The new School will accommodate 1,020 children, and will be erected on a site at the top of Fearnley Street, recently purchased from the Earl of Essex, and containing one acre. The approximate cost is £10,200.

WHITLEY.—The Foundation Stone of the Hall and Sunday Schools in connection with the proposed new Presbyterian Church, at Whitley, is to be laid by Sir George B. Bruce, tomorrow. The cost of the whole site, together with the contemplated buildings, will be upwards of £2,000.

YSTALYFERA.—New Schools have recently been completed, and form in themselves what might be called a "Model School." The accommodation is for 80 Boys and 40 Girls. The Schools have been arranged so as to afford every convenience coupled with economy. For the boys, Chemical Laboratories, &c., are provided; and for the girls, Cooking Class Room, Music Rooms, &c., besides the usual Class Rooms, and a large Assembly Room. The plans were prepared by Messrs. Wilson & Moxham, Architects, Swansea, and were approved by the Glamorganshire County Council and the Charity Commissioners.

SOCIETY MEETINGS.

South Staffordshire and East Worcestershire Institute of Mining Engineers.—About twenty of the members of the South Staffordshire and East Worcestershire Institute of Mining Engineers recently paid a visit to the James Bridge Steelworks of Messrs. F. H. Lloyd & Co., and the Generating Station of the South Staffordshire Tramway Company. The party was personally conducted over the works of the first-named company by Mr. J. W. Hall and Mr. J. Heming, two of the directors, who, in the fullest manner, explained all the processes, and submitted special test pieces and records. Several large orders in course of execution were seen, and much surprise was expressed to find that cast steel could be applied to so many uses, as well as gratification that a South Staffordshire firm had brought the system of casting in steel to such a pitch of efficiency. Afterwards the party inspected the Generating Station, under the guidance of Mr. A. Dickinson, engineer and manager, who stated that his overhead electric traction system extended for eight miles, and he explained the arrangements which had been made to overcome objections and difficulties.

Somerset Archæological Society.—The forty-seventh annual meeting of this Society was held at Bath last week, and extended over three days. The proceedings opened on Tuesday, when Mr. H. D. Skrine, this year's president, took the chair at the annual meeting at the Royal Literary and Scientific Institution, which has been chosen as the head quarters of the Association during the meeting. Mr. F. T. Elworthy read the report of the Council, which stated that the Society numbered 569 members, though the balance in hand had been reduced to 17s. 2d., against £49 4s. 2d. the previous year. Nineteen new members were elected, and Mr. E. B. C. Trevellan (retiring president) and the Bishop of Bath and Wells were added to the list of vice-presidents. The President's address, which was of considerable Archæological interest, dealt with the occupation of Hampton and Claverton Downs just outside Bath by the Belgic conquerors of the South of England. In the evening a meeting was held at the Literary Institution for papers and discussion. The Dean of Wells (Dr. Jex Blake) presided. Rev. Canon Church read some interesting notes which he had made on the cartulary of the Priory of SS. Peter and Paul, Bath. Rev. T. S. Holmes gave a paper written by Bishop Hobhouse on a map of the Forest of Mendip. An excursion was made on Wednesday to Great Chalfield Church and Manor House, Bradford-on-Avon parish Church, and the Saxon Church at Bradford; the Bridge Chapel, Kingston House, and the fourteenth-century barn having been viewed, Westwood Church and manor house, Hinton Abbey, Charterhouse Hinton, were also seen. On Thursday the first place visited was Chapel Farm, Lansdown, viewing the site of the battle of Lansdown, the camps, and the monument of Sir Bevil Grenville, thence to Cold Ashton Church and Manor House, and on to Marshfield Church. The party then proceeded by Bannerdown and Batheastoo, to Claverton Manor, and the camps in the neighbourhood.

Sheffield Junior Engineering Society.—A meeting was held on Friday night in the Engineering Lecture Room at the Central Science School, when a paper was given by Mr. H. J. Kuypers on propeller bosses, Mr. Eclair Heath, Whit.Sc., in the chair. The Lecturer gave a very interesting account of the manufacture of bosses, and showed by means of slides how accurate work could be turned out of shops with apparatus designed for the purpose of boring, turning, facing, scraping, &c. He also emphasised the necessity of careful work required when fitting on to the shafts of steamers. In the discussion that followed, Mr. Eclair Heath gave some useful information in reference to keying on of propellers and propeller work generally.

The Birmingham Association of Mechanical Engineers.—A party of members of the above Association recently paid a visit of inspection to the Saltley Gasworks. They were received by Mr. H. Hack (chief engineer), Mr. Morrison and Mr. Giles, the

latter of whom is a member of the Association. The party took a great interest in the novel mechanical arrangements which have been introduced into the works.

The Birmingham Architectural Association.—The second annual sketching excursion of this Association is to be held at Ludlow and the neighbourhood on the 3rd, 4th, 5th, and 6th of next month. The number is to be limited to twenty, and photographers are requested to bring their cameras. Messrs. Charles E. Bateman and Herbert T. Buckland are the hon. secretaries.

SAWDUST.

THE death is announced of Professor Charles Cardale Babington, M.A., F.R.S. He was born at Ludlow in 1808 and educated at St. John's College, Cambridge. As an antiquary he is known by his "History of the Chapel of St. John's College, Cambridge," by his "Ancient Cambridgeshire," and by various contributions to "Antiquarian Transactions."

THE east-end exterior of St. Nicholas new Church, Shaldon, has been considerably improved by the erection of a wrought-iron foliated Cross, about six feet high.

IN Greene County, Tennessee, is a very beautiful Cave. The entrance is in the side of a ridge, about midway between the summit and the base, and merely a hole about five feet square. From the entrance is a long, narrow slope, leading into a subterranean chamber, with groined roof and well-turned arches, and numbers of stalactites and stalagmites. Narrow passageways connect this chamber with a number of others, in one of which is "Pompey's Pillar," a column about 20 feet high and two feet in diameter, which glitters like a cluster of gems in the torchlight.

A NEW Fire Station is to be built at Islington, on a site of which 42, 43, 44, and 45, Florence Street, Islington, form part.

THE new Horfield Baptist School-Chapel, Bristol, was opened on Thursday. The site for the new Chapel and School was secured through the Bristol Baptist Union, and the Committee thereupon entered upon the present large and comprehensive scheme, the total cost of which is estimated at about £6,000. A start has been made by building Schools and Vestries, involving an outlay of about £2,000, and in due course, the remainder of the scheme will be proceeded with. The School building will seat 500, and is provided with a Baptistry, being intended to serve the double purpose of Chapel and School until the Chapel is erected.

THE Bellahouston Trustees have offered to give to the City of Glasgow the Bellahouston Estate at what is, in the circumstances, the nominal sum of £50,000. The conditions attached to the offer are that the Estate, which extends to about 180 acres, should be converted into a public park for the use of the citizens, and that the park should be named the Bellahouston Park.

THE alterations at the Loughborough Workhouse are to be carried out by the Board of Guardians at a cost of £738.

FOR the erection of a new Workhouse, Doncaster, the Local Government Board has sanctioned the borrowing by the Board of Guardians of £6,350.

THE Rawtenstall Town Council proposes to spend the sum of £4,000 for a new Fire-engine Station, Stables and Fire-engine.

DIBDIN'S House at Hanger Hill, near Ealing, has been put up for sale and withdrawn. There was no offer that came near the reserve price. At another time such a chance would be most eagerly embraced, but a good many desirable properties are still on hand in the inability to find customers for them.

THE Department of Science and Art has received information through the Foreign Office that an Industrial Exhibition is to be held next year at Berlin.

It has been decided by the Darlington Board of Guardians to ascertain the cost of building new offices with a Board Room attached, allowance being made for what the present offices of the Board would realise.

SIX Memorial Stones have just been laid of an enlargement of the Antley Wesleyan Chapel and School premises, Accrington, which is to cost about £3,000.

A RISING young Architect—Mr. Bell, of John Street, Bedford Row, formerly with the late John D. Sedding and T. G. Jackson, A.R.A.—made a successful ascent of the snowy summits of the Well and Wetterhorn on the 10th, and beyond a slight mishap on the Rosenlani Glacier—which might have been more serious, and only ended in losing a few sketches down a crevice—Mr. Bell is none the worse for the adventure. The Wetterhorn was first ascended by the late Professor Tyndall and later on by Edward Whymper, and is considered a difficult climb.

THE Felixstowe and Walton District Council proposes to make application to the Local Government Board for sanction to borrow £1,700 for the purchase of land and cliffs for laying out and improving the land, and for the provision of Lavatories, Shelters and Cloak Rooms.

THE Duke of Newcastle on Tuesday laid the Foundation Stone of St. Catherine's Church, St. Anne's Well Road, Nottingham, which is being built at a cost of £6,000 to replace a temporary iron structure.

THE Earl of Dunmore has just purchased for £35,000 a farm near Johannesburg. He is so impressed with the general prospects of the country that he purposes building a large house on the farm and taking his family out from Scotland to reside there.

A NOVEL sort of window-glass has been invented. Persons on the inside of the house can see through it, but it is opaque to those on the outside.

THE Church at Easington, County Durham, which has been closed for nearly twelve months for the carrying out of improvements, was re-opened on Wednesday by the Bishop of Durham. The total cost of the improvements is over £3,000.

THE Queen has just received a quaint and original birthday gift from India. It is the life of her Majesty written in Hindustani. The biography is produced on a huge scroll, and the curious feature of the work is its design. At first sight it resembles a fanciful pen and ink sketch of a majestic tree, but on a closer examination the student of Hindustani may read the biography of the Queen up the trunk and along the branches. The penmanship is remarkably fine, and is said to have been the result of more than a year's labour.

THE formal opening of the new access from Bell Place, Glenogle Road, to Inverleith Park, Edinburgh, took place last week. At an expenditure of something like £600, the Corporation has constructed a rustic Footbridge of a substantial character over the water of Leith, and laid out a path along the north bank of the stream, which, on crossing the main thoroughfare, takes the passenger into Inverleith Park. This should be a great boon to the residents in the locality.

AFTER ten years' work in temporary buildings, the authorities of the Cambridge Training College for Women Teachers have been able to erect large and handsome College buildings by means of a grant from the Pfoiffer bequest and voluntary subscriptions. The new buildings will be formally opened on October 19th.

It has now been practically settled that the chief sensation of the Paris Exhibition of 1900 will consist of a new Bridge over the Seine 100 metres broad, and with Houses, Theatres and Monuments on either side of it, like the Pont Neuf in olden days, not to mention old London Bridge. It will span the Seine from the Champs Elysées to the Invalides.

It is not often that the foundation stone of a public building is "laid" twice. Such was the case on the occasion of Princess Beatrice's visit to Hackney. So anxious were the masons of the Free and Parochial Schools to see the work completed, they had actually lowered the stone into position before the Princess had performed the necessary offices prior to declaring it to be "well and truly laid." There was, therefore, nothing to be done but to raise the stone again.

At the Old Town Hall, Morley, on Thursday last, Colonel John Ord Hasted, R.E., representing the Local Government Board, held an inquiry into an application by the Morley Town Council to borrow the sum of £42,000 for purposes of water supply.

The Builders' Journal COMPETITIONS.

No. 5.—A Cottage Hospital.

Designs are required for a Cottage Hospital on a Corner Site in a County Town. Provision must be made for twelve beds (six women and six men), with Matron's and Superintendent's Apartments, Convalescent Room, and all necessary domestic and sanitary accommodation. A sum of three thousand pounds may be expended on the building and terrace. Designs to reach the Editor not later than Monday, August 26th, 1895.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.
Per line, Sixpence. Minimum charge, Eighteenpence.
Three Insertions for the price of Two.
Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

MAJOR RUCK, R.E., and Dr. Tyndall, from Netley Hospital, recently visited Ipswich for the purpose of officially inspecting the Hermite Electrical Installation now used in the treatment of the Ipswich sewage. The visitors, under the guidance of Mr. A. E. Cooper (of the firm of Pattison & Cooper, the engineers) thoroughly entered into the details of the process, and took practical observations upon the results of the treatment, expressing their high appreciation of the system of dealing with sewage.

For the building of the Jungfrau Railway 9,000,000 francs will be required. Plans for the first section of the railway are finished, and it is supposed that next month the laying of that portion of the line from Scheidegg to Eigergletscher will be begun, and in three months be nearly completed. In view of the undertaking of the building of the Jungfrau Railway, artists in all branches of Art are busy with views of the neighbourhood of the Jungfrau group of mountains for the Geneva National Exhibition.

Trade and Commerce.

The National Opalite Glazed Brick and Tile Syndicate, Ltd.—We are asked to state that this firm has removed from 142, Charing Cross Road, to Ethelburga House, 70-71, Bishopsgate Street Within, E.C.

Messrs. Colls & Sons.—A fire of an alarming character broke out at a quarter to three o'clock on Friday morning, at 5, Coleman Street, upon the premises of Messrs. Colls & Sons, Builders. The earliest arrivals at the scene found that the entire upper portion of the premises was blazing fiercely, while the mischief was spreading to a second building of three floors, 90 feet long and 30 feet wide, which was used as Showrooms, Offices and Workshops. At three o'clock the fire was at its height, and was illuminating half London. The entire workshops of four floors were blazing from top to bottom with tremendous fury, and the fire seemed likely to be of a most lasting and troublesome description. Six steamers and several of the powerful City hydrants were brought into use, and the firemen worked very arduously to prevent a serious extension of the mischief. One of the buildings most seriously threatened was an unoccupied structure in Basinghall Avenue, owned by the Draper's Company; but this the firemen succeeded in saving. Messrs. Colls' Workshops were eventually gutted, and considerable damage was caused to the second structure. The office portion of Messrs. Colls' building was saved, and work will be promptly carried on in adjoining premises.

W. & T. Avery, Limited.—The first meeting of the shareholders in the new Company, Messrs. W. & T. Avery, Limited, carrying on the well-known scale and weighing machine manufactories at Birmingham, Glasgow, London, &c., has just been held in Birmingham, Mr. W. B. Avery presiding. The directors' report, which was approved, showed a net profit on the nine months, since the new Company took over the business, of £7,369 and recommended payment of dividends of five per cent. on the preference and ordinary shares. These will absorb £2,125. The preliminary expenses, £1,041, were ordered to be written off, £1,500 to be placed to a debenture redemption fund, and £2,702 to be carried forward. It was stated that the Company had acquired the once famous Soho Works from the Trustees of James Watt & Co., and intended to concentrate there the whole of their business, and that the expense of this removal had influenced the directors in not recommending a higher dividend than five per cent.

A Trade Union Dispute.—In the Queen's Bench Division, on Thursday, Baron Pollock and a special jury had before them the case of Wright & Co. v. Hennessey. This was an action brought by Samuel Wright & Co., fibrous plaster manufacturers, carrying on business at Hackney, to recover damages from the defendant, Samuel Hennessey, organising secretary of the National Association of Operative Plasterers, for alleged libel and maliciously inducing and endeavouring to induce persons to break their contracts with the plaintiffs and for an injunction restraining the defendant, his servants and agents, from inducing or endeavouring to induce Messrs. Colls & Sons to break a contract made with the plaintiffs in respect of work for and at the Pavilion Theatre, Whitechapel, from inducing Messrs. Colls' men to go on strike, and from inducing any persons from employing or making contracts with the plaintiffs. The defendant generally denied the plaintiffs' allegations, and pleaded privilege. The plaintiffs' case was that they manufactured fibrous plaster at their works and then employed labourers to fix the moulds, &c., on the buildings, this being work on which, they contended, it was not necessary to employ plasterers. The defendant's Union, however, maintained that members of the Union should be employed to do the work.

London County Council v. J. Sanders.

—At the Marylebone Police Court John Sanders, a builder, of 49, Lisburne Road, Hampstead, was summoned by William Smallpeice, District Surveyor for East Hampstead, for using mortar the ingredients of which did not conform to the requirements of the by-laws of the London

County Council. The evidence was that the defendant was the builder of a house known as 5, Constantine Road, Hampstead, in the erection of which he had used mortar which was deficient in lime to the extent of fifteen degrees. Mr. Nimmo, for the defence, admitted that his client had committed a technical breach of the by-law, but contended that similar mortar had been commonly used in the Metropolis for years past. He added that if the prescribed amount of lime was used the mortar would set too quickly. A specialist called for the defence stated that the mortar used was good enough for "speculative building," but it was not "high class." The magistrate, having remarked upon the absence of any professional gentleman to conduct the case for the London County Council, observed that the defendant's own witness had damned the case by his faint praise of the article used. It was clear that it was not up to the standard which the public had a right to expect. The public were absolutely at the mercy of the builders, and if they used inferior mortar it was nothing less than a fraud upon the persons who took the house. He imposed a fine of 40s. and 23s. costs.

The Building Trade.—The London Building Trades' Federation recently celebrated the third anniversary of its formation in Hyde Park. Immediately after the signing of the agreement with the master builders in 1892, which until last month governed the conditions of work in the building trade within a twelve-mile radius of Charing Cross, steps were taken to bring about a federation of all the trade unions in the building trade. So far, the attempt has been very successful, and the twenty-four unions now belonging to it have some 38,000 members in the London area. The general uneasiness which has characterised the building trades since the 1892 agreement was abrogated, gave additional interest to yesterday's proceedings, which were, however, spoiled by the wet. Still, there was a brave show of banners on the Embankment when at three o'clock the procession marched off to the Park. Most of the unions federated were represented by their bands and banners, including the gasworkers, the navvies, and the other unions of bricklayers' labourers, the four unions of carpenters and joiners, the two unions of operative plasterers, the operative bricklayers, and the plumbers. There were two platforms in the park, at one of which Mr. Joseph Verdon, the secretary of the London Building Trades' Federation, presided, and Mr. Stevenson, the secretary of the United Builders' Labourers Union, at the other. The following were the two resolutions which were put and carried from each of the platforms:—(1) That this meeting of building trades workers considers that the action of the Central Association of Master Builders in terminating the agreement entered into in 1892 is both unnecessary and uncalled for, and if persisted in can have but one effect, and that the total disruption and dislocation of the building industry; and this meeting pledges itself to resist to the utmost any violation of the said agreement. (2) That this mass meeting of the workers employed in the building trades considers that the time has arrived when active steps should be taken to secure the direct representation of the building trades upon all local and municipal bodies, and pledges itself to use all legitimate means at its disposal to carry the same into effect; and it further resolves not to support any candidate for such bodies, who is not pledged to vote that trade union rates of wages and conditions of work shall be observed on all contracts."

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BOURNEMOUTH.—For the making-up of Firs-terrace and other paths with as-halte and tar paving, for the Corporation. Mr. F. W. Lacey, Borough Surveyor, Bournemouth:—

Asphaltic Limestone Concrete Co., Ltd., Queen Victoria-street, E.C.4.	£171 18 0
The Mendip Granite and Asphalt Co. (for part of work only)	82 16 4

* Accepted.

BARNESLEY.—Accepted for additions, &c., to school buildings, Old Town, for the School Board. Messrs. Senior and Clegg, architects, 15, Regent-street, Barnesley. Quantities by architects:—

Taylor, John, Barnesley, masonry	£537	12	0
Smith, James, Gawber, near Barnesley, joinery	330	0	0
Rushforth, S., Barnesley, plumbing	49	0	0
Dryden, C., Barnesley, plastering	32	0	0
Fleming, E., Barnesley, slating	80	0	0
Beaumont, W., Barnesley, painting	14	0	0

BEDFORD.—Accepted for the supply of 2,000 tons broken granite for the Urban Sanitary Authority:—
Narborough and Enderby Granite Co.,
Narborough, near Leicester, per ton £0 8 6

BEXLEY HEATH.—Accepted for reinstating two villa residences after fire, for the Law, Union, and Crown Fire and Life Assurance Co. Mr. W. Clinch, surveyor:—
Multon and Wallis ... £653 0 0

BOURNEMOUTH.—For making-up Cecil and Horace-roads, Boscombe, for the Corporation. Mr. F. W. Lacey, Borough Engineer, Town Hall, Bournemouth:—
Saunders, W. H., and Co. ... £373 14 0
Alford, S. J. ... 370 0 0
Troke, George, Winton, Bournemouth ... 356 19 2½
* Accepted.

CARLISLE.—Accepted for additions to the Viaduct Temperance Hotel. Messrs. Moffat and Bentley, architects, Whitehaven:—

Laing, John, Carlisle, Masonry and Bricklaying.			
Nanson, Charles J., Carlisle, Slating.			
Ormerod, R., and Son, Carlisle, Plastering.			
Beatty, R., Carlisle, Carpentry and Joinery.			
Fisher, Hy., and Co., Cockermouth, Plumbing.			
Electric Bells, and Gasfitting.			
Nelson and Son, Carlisle, Painting and Glazing.			
Total	£3,300	5s.	11d.

CROMER.—Accepted for road-making, sewers, &c., at Cromer, Norfolk. Mr. A. F. Scott, surveyor, Norfolk:—
Cook, B., and Co., Battersea ... £2,000 0 0

DARENTH.—For the erection of school buildings for the Darenth School Board. Mr. F. M. Kirby, architect:—

Miskin ...	£2,070	0	0
Young ...	2,040	0	0
Carter ...	2,026	0	0
Grady ...	2,018	0	0
Somford and Son ...	1,949	0	0
Trueman and Son ...	1,840	0	0
Multon and Wallis (accepted) ...	1,788	0	0
Wilford, J. (withdrawn) ...	1,666	0	0

GRAVESEND.—Accepted for rebuilding house and studio, Manor-road, for Mr. J. N. Willis. Mr. J. Gould, architect:—
Multon and Wallis ... £475 0 0

HANLEY (Staffordshire).—For new school at Cauldon-road, for the Hanley School Board. Messrs. R. Scrivener and Sons, architects, Hanley:—

Whitfield ...	£3,959	0	0
Godwin ...	3,935	11	0
Bennett ...	3,858	0	0
Bagnall ...	3,791	10	0
Cornes ...	3,775	0	0
Cooke ...	3,690	0	0
Ellis, Hanley (accepted) ...	3,680	0	0

HARROW.—Accepted for the erection of new offices, meter-house, &c., at the Harrow Gasworks, Harrow. Mr. J. L. Chapman, engineer. Messrs. Cowell and Gray, surveyors:—
Webber, A. A. ... £1,050 0 0

ILFORD.—For erecting a house in Clement's-road, Ilford, Essex, for Mr. W. E. Collins. Mr. F. G. Fauch, architect, St. Neots, Hunts:—

Hearle and Farrow ...	£425	0	0
Hosking, G. J. ...	413	0	0
North ...	395	0	0
Walter ...	385	10	0

LEDGERY (Herefordshire).—For alterations and additions to the "Biddulph Arms" Hotel, for Mr. Michael Biddulph, M.P. Mr. G. H. Godsell, architect, Hereford:—
Hill, Geo. ... £488 5 0
Smith, D., Ledgery (accepted) ... 340 0 0

EAST WESTMORELAND.—For the water supply of the Kirbythore, Templeswerby, and Newbiggin Districts for the East Westmoreland Rural District Council. Messrs. George Watson and Sons, Engineers, Penrith.

Contract No. 1. Pipes.	Contract No. 2. Valves and Hydrants.	Contract No. 3. Excavating, Carting, Laying Mains, Reservoir, &c.	For the Whole Works.
------------------------	--------------------------------------	---	----------------------

Haley, E. & W. ...	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
H., Bradford ...	1312	0	0									
Cochrane & Co.,												
Dudley ...	1246	8	3									
Stanton Iron Co.,												
Nottingham ...	1241	7	9									
Clark, exors. late												
D., Carlisle ...	1221	16	1	132	2	5						
Ferguson, L.,												
Workington ...	1195	10	0									
Hudson, J., jun.,												
Sunderland ...	1194	0	0	207	0	0	1450	0	0	2796	0	0
Clay Cross Co.,												
Chesterfield ...	1182	5	11									
Laidlaw, R., &												
Son, Glasgow ...	1149	4	2	185	4	0						
McEwan, J., &												
Co., Glasgow ...	1138	2	8									
McKnight, J., &												
Sons Edinboro' ...	1131	11	4	131	2	1	1206	12	3			
Allen, T., & Son,												
Stockton - on -												
Tees ...	1114	6	4									
Shaw, J., & Co.,												
Glasgow ...	1111	3	2									
Jackson, Joseph,												
Penrith ...	1079	1	6	127	3	3	979	8	10	2185	13	7
Dodds Bros., &												
Co., Newcastle ...	1066	18	2	129	4	4						
on-Tyne ...												
Ritchie, J., Mid-												
dlesbro' ...	1053	6	6									
Watson, Gow &												
Co., Glasgow ...	1038	17	9									
Monier, Williams												
& Co., Middles-												
bro' ...	1030	1	0									
Dirkin Bros.,												
Kendal ...	1009	1	3	225	0	0	1254	19	3			
Guest & Chimes,												
Rotherham ...												
Clay & Henriques,												
Dewsbury ...												
Glenfield Co., Kil-												
marnock ...												
Stone, J., & Co.,												
Deptford ...												
Blackboro', J., &												
Sons, Brighouse												
Yorkshire ...												
Hamilton Woods												
& Co., Salford,												
Manchester ...												
Hall, N., Dudley												
Hill, Bradford ...												
Hunter, J., Mary-												
port ...												
Fisher, J., & Co.,												
Cockermouth ...												
Dixon, J., Pen-												
rith (accepted) ...												

LONDON.—For exterior painting to the Holden-street Board School, for the School Board for London:—

Holloway Bros. ...	£390	0	0
Lathey Bros. ...	371	0	0
Flood ...	284	0	0
Garrett and Sons ...	260	0	0
Girling ...	263	0	0
Brown ...	245	0	0
Peacock ...	237	0	0
Williams, R. E., and Sons ...	210	0	0
Trigg ...	195	0	0
Tucker (accepted) ...	194	0	0

LEDGERY (Herefordshire).—For the erection of a public hall at the Royal Oak Hotel, for Mr. E. H. Hopkins. Mr. G. H. Godsell, surveyor, Palace-chambers, Hereford:—

Lewis ...	£1,317	9	4
Smith, D. ...	1,315	0	0
Hill, Geo., Ledgery (accepted) ...	1,298	0	0

For additional works to same—
Hill, Geo., Ledgery (accepted) ... £27 0 0

LEEDS.—For the erection of school buildings, All Saints' Church, Pontefract-lane, for the Managers. Mr. J. M. Bottomley, architect, 46, Albion-street, Leeds. Quantities by the architect:—

For the whole of the work:—			
Bentley, Joseph ...	£2,763	11	6
Rhodes, Paul ...	2,728	1	3
Wood and Airey ...	2,618	13	0
Accepted Tenders for the several departments of the work:—			
Wood and Airey, excavating, brick-			
laying, and masonry ...	1,249	17	11
Rhodes, Paul, carpentry and iron-			
work ...	678	0	0
Atkinson, Wm., slating ...	106	16	0
Pennington, Wm., cementing ...	136	0	0
Thompson, Geo., plumbing and			
glazing ...	297	0	0
Horsman, R. J., painting ...	39	4	0
Total ...	2,506	17	11
[All of Leeds]			

LEIGHTON.—For the erection of new farm buildings at Rislip Farm, Soubury, for Mr. Percy Lovett. Mr. J. T. Lawrence, architect, Leighton, Beds. Quantities by the architect:—

Coleman, T. H. ...	£547	0	0
Webster and Cannon ...	493	0	0
Garside, G. and Son ...	484	0	0
Tutt Bros. ...	469	0	0
Edwards Bros. ...	467	0	0
Cock, D. and Sons ...	404	0	0

LONDON.—For rebuilding No. 12, Great Castle-street, Oxford-street, W. Mr. T. H. Smith, architect:—

Bash and Sons ...	£3,300	0	0
Patman and Fotheringham ...	2,999	0	0
Nightingale ...	2,955	0	0
Saunders ...	2,876	0	0
Kearley ...	2,869	0	0
Anley ...	2,760	0	0
Webber, A. A. ...	2,733	0	0
Holloway, H. L. ...	2,720	0	0

LONDON.—For rebuilding No. 26, Castle-street east, W. Mr. A. J. Hopkins, architect and surveyor:—

Boyce, Thos. ...	£2,340	0	0
Patman and Fotheringham ...	2,262	0	0
Kearley ...	2,164	0	0
Beer and Gash ...	2,074	0	0
Webber, A. A. (accepted) ...	2,033	0	0
Hatfield and Son ...	1,469	0	0

LONDON.—For rebuilding No. 3, Market-place, Oxford-street. Mr. H. J. Hollingsworth, architect, 67, Claremont-road, Forest Gate:—

Gregar and Son ...	£2,493	0	0
Hall, Bedall and Co. ...	2,456	0	0
Lawrence and Sons ...	2,211	0	0
Webber, A. A. ...	2,193	0	0
Courtney and Fairbairn ...	2,059	0	0
Anley ...	2,016	0	0
Everard ...	1,987	0	0

LONDON.—For additional story, &c., to No. 14, Campden Hill-road, W. Mr. W. Batting, architect:—

Andrews ...	£359	0	0
Galpin ...	335	2	10
Webber, A. A. ...	333	10	0

LONDON.—For exterior painting to the Tennyson-road Board School, for the School Board for London:—

Lathey Bros. ...	£329	0	0
Holloway ...	323	0	0
Girling ...	298	0	0
Peacock ...	248	0	0
Nightingale, B. E. ...	210	0	0
Williams, R. E., and Sons ...	190	0	0
Trigg (accepted) ...	167	0	0

BRICKS

2½ or 3 inch **PRESSED BRICKS**
Cheaper & Better than **STOCKS.**

LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.

Low Quotations for Truck Loads of Three thousand to any London or Country Railway Station.

A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
Brickworks and Railway Siding on Great Eastern Railway.

JOHN BENNETT, 32, Guilford Street, London, W.C.
GRANITE, MARBLE, MOSAIC & TILE WORK OF EVERY DESCRIPTION.
ESTIMATES AND DESIGNS FREE.
WORKS: 1, 19 & 20, BRUNSWICK MEWS, W.C.

GARTER & CO.
TILES MOSAIC
FAIENCE
Poole Dorset

TELEGRAMS—
"WEATHERVANE, LONDON."

J. LEWIS, 5 & 6, Great Winchester Street, LONDON, E.C.

LIGHTNING CONDUCTORS.

ELECTRICAL EXHIBITION CRYSTAL PALACE AWARD, 1892.

"LEWIS LINK," the only **EFFICIENT COUPLING** for Conductors. **PATENT No. 16,641**

SEE SECTION FIG. 2.

VILLAS, MANSIONS, SCHOOLS, CHURCHES, FACTORIES, CHIMNEY SHAFTS, &c.



ROBT. ADAMS, 67, Newington Causeway, London, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self Compensating

SPRING HINGES

Guaranteed to last
longer and work better
than any hitherto
made.
CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to and
closes from the angle
of 135°

Fig. 3 is the new
Single Action Spring.
It opens to and closes
from the angle of 180°
i.e., "wide back."

THE FIRST
SPRINGS EVER
PRODUCED WITH
THESE GREAT
ADVANTAGES.

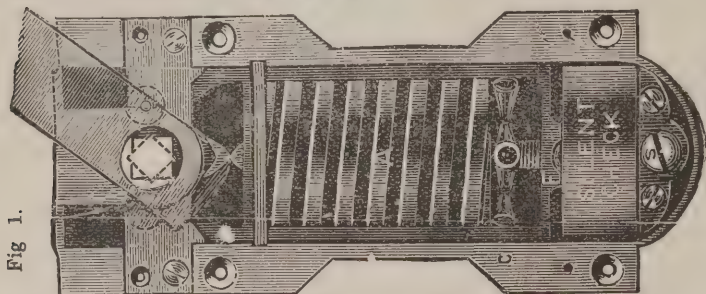


Fig. 1.

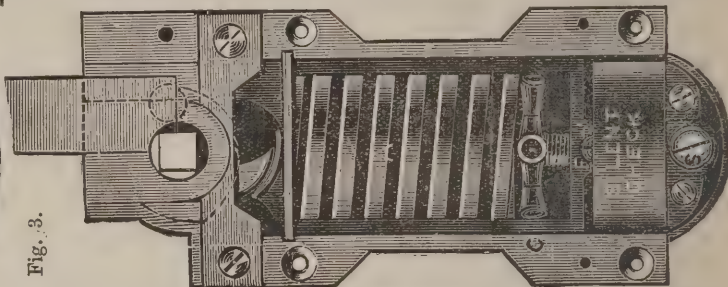


Fig. 3.

LONDON.—For the execution of paving works, asphalt, &c., for the Vestry of St. Margaret and St. John, Westminster. Mr. G. R. W. Wheeler, surveyor, Town Hall, Caxton-street, Westminster, S.W. :—

	Compressed Asphalte, 1-in. thick, on 3 in. of Concrete.	Compressed Asphalte, 3/4-in. thick, on 3 in. of Concrete.	Mastic Asphalte, 1-in. thick, on 3 in. of Concrete.	Mastic Asphalte, 3/4-in. thick, on 3 in. of Concrete.	Mastic Asphalte, laid with Com- pressed Asphalte, 1 1/2-in. thick, on 6 in. of Concrete.	Compressed Asphalte, 2-in. thick, on 6 in. of Concrete.
At per yard	super. s. d.	super. s. d.	super. s. d.	super. s. d.	super. s. d.	super. s. d.
Limmer Asphalte Paving Co., Ltd. (accepted)	6 3	5 6	6 6	5 9	7 0	10 3
French Asphalte Co.	6 6	5 9	6 6	5 9	7 0	10 6
Val de Travers Asphalte Paving Co., Ltd.	6 6	5 9	6 6	6 0	7 0	10 6

LONDON.—For the execution of road-making and paving works, Verbena-gardens, for the Hammersmith Vestry. Mr. H. Mair, C.E., Vestry Hall, Broadway, Hammersmith, W. :—

	Verbena-gardens, Section No. 1.	Verbena-gardens, Section No. 2.	Bradmore Park-road.	Church- road.
Rogers and Co.	£293 0 0	£256 0 0	£143	£96
Wimpey and Co.	278 0 0	260 0 0	124	80
Nowell and Robson, Kensington (accepted)	239 0 0	262 0 0	110	55
Lee, George	298 16 0	304 18 9	—	—
Greenham, H. J.	280 0 0	255 0 0	120	80
Bail, John	287 0 0	277 0 0	—	—

LONDON.—For exterior painting at the Latchmere-street Schools, for the School Board for London :—

Rice and Sons	£489 0 0
Stimpson and Co.	274 0 0
Holliday	103 0 0
Tucker	158 0 0
Williams, R. E., and Sons	139 0 0
Hammond, W.	130 10 0
Trigg (accepted)	125 0 0

LONDON.—For forming roads, laying out and draining a recreation-ground, at the North-Eastern Hospital, Tottenham, for the Metropolitan Asylums Board. Messrs. A. and C. Harston, architects, 15, Leadenhall-street, E.C. :—

Leslie and Co.	£1,125 0 0
Ballard, Ltd.	917 0 0
Holmes, W.	857 10 0
Neal and Co.	837 0 0
Hipwell, S.	820 0 0
Osenton, G.	812 0 0
Bowles, J.	800 0 0
Bloomfield, J. E.	799 15 0
Nicholls, W.	785 0 0
Adams, T.	745 0 0
Crane, H.	724 0 0
Bell, G.	663 0 0
Catley, A. T., 23, Lloyd-square, W.C.*	600 0 0

LONDON.—For pulling down and rebuilding No. 27, Rodney-street, Pentonville, N., for Mr. Eady. Mr. G. Baxter, architect :—

Barlow and Roberts	£1,434 0 0
White, A., and Co.	1,429 0 0
Hancock	1,189 17 5
Hunt	1,152 0 0

LONDON.—For the erection of an ambulance nurses' block and coach-houses, at the Eastern Ambulance Station, Homerton, for the Metropolitan Asylums Board. Messrs. A. and C. Harston, architects, 15, Leadenhall-street, E.C. Quantities by Messrs. Fowler and Hugman :—

Cox, C.	£3,140 0 0
Todd, G. E.	2,700 0 0
Jarvis and Son	2,652 0 0
Johnson, W., and Co., Ltd.	2,475 0 0
Leslie and Co., Ltd., Kensington-square, W. (accepted)	2,401 0 0

LONDON.—For the erection of first part of St. Mark's Church, Plumstead Common, for the Rev. Albert Baillie, Mr. R. J. Lovell, architect, 46, Queen Victoria-street, E.C. Quantities by Mr. Jas. Kennedy, 31, Great James-street Bedford-row, W.C. :—

Simpson and Sons	£3,993 0 0
Jerrard and Sons	3,589 0 0
Roberts, L. H. and R.	2,472 0 0
Proctor, E.	3,455 0 0

LONDON.—For painting, &c., the exterior of the Lewisham Bridge Schools, for the London School Board :—

Banks, W.	£119 14 6
Procter, E.	97 0 0
Couchman and Co.	86 11 0
Mid-Kent Building and Contracting Works	79 0 0
Akers, W., and Co.	78 0 0
Leney, H.	77 3 0
Jones and Gores	70 5 0
Brett, A. (accepted)	70 0 0

LADDERS, BARROWS, STEPS, TRESTLES, SCAFFOLDING, For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

Quantities, &c., Electrographed
Equal to Lithography and 50 per cent. CHEAPER. Prices and
specimens on application. Lithography at moderate rates.

OLDACRES & CO.,
59 & 60, CHANCERY LANE, LONDON, W.C.
N.B.—No connection with any other firm.
Telegrams, "OLDACRES, LONDON."

LONDON.—For alterations, repairs, and decorations to No. 207, Romford-road, Stratford, E., for the Rev. A. Armitage. Messrs. H. Ough and Son, architects, 84, St. Paul's Church-yard, E.C. :—

Hosking, G. J.	£668 0 0
Spiers and Son	645 0 0

LONDON.—For building stables and coach-house at Cole-street, Southwark, for the Honourable the Trinity Corporation. Messrs. Jarvis and Son, architects :—

Downs, W.	£966 0 0
Faulkner	950 0 0
Parker	922 0 0
Courtney and Fairband	900 6 0
Leney, Henry, Penge (accepted)	899 0 0

LONGRIDGE (LANCS.).—Accepted for the construction of 2,500 yards earthenware pipe sewers, for the District Council. Mr. Theo. S. McCullam, C.E., 4, Chapel Walks, Manchester :—

MORPETH.—Accepted for the erection of a villa-residence at Morpeth, for Mr. John Paton. Mr. Geo. Reavell, junr., architect, Alnwick :—

	For House.	For Boundary Wall.
R. Carse and Son, Amble	£1209 10	£109
MOTtingham (KENT).—For building five houses at Mottingham, near Eltham, Kent. Messrs. Logsdail and Beale, architects and surveyors, New Eltham, S.E. :—		
Toms	£3,275 0 0	
Larke and Sons	2,870 0 0	
Jerrard and Son	2,700 0 0	
Rider and Son	2,465 0 0	
Webber, A. A.	2,300 0 0	

NANTYLO (MON.).—For additions to school buildings, Garnvach, for the Aberystroth School Board. Mr. Geo. Rosser, architect, Victoria-buildings. Quantities by Mr. R. L. Roberts, Newbridge, Abercarn, Mon. :—

Richards, A.	£1,285 0 0
Wilkins, G. H.	1,178 0 0
Newby, E. C.	1,149 0 0
Hatherley and Carr	1,095 0 0
Davies Bros.	1,000 0 0
Morgan, J. T.	950 0 0
Jenkins, Jno., Brynmawr (accepted)	862 15 0

NOTTINGHAM.—For the construction of a new road at Bulwell, for the Corporation. Mr. Arthur Brown, C.E., Borough Engineer, Guildhall, Nottingham :—

Vickers, J. H.	£9,200 0 0
Baker and Sons	8,955 17 5
Hawley, J., and Son	8,171 11 5
Tomlinson, J.	7,950 0 0
Smart, Thos.	7,825 0 0
Logan and Hemingway, Mansfield-road, Nottingham (accepted)	7,769 4 0
Hodson and Sons (withdrawn)	6,900 0 0

OSWESTRY.—For the erection of four houses, Ferraers-road, for Mr. Tom Leake. Mr. F. H. Shayler, architect, 33, Willow-street, Oswestry :—

Howells	£1,846 6 0
Davies, E.	1,759 0 0
Southern, W. W.	1,500 0 0
Thomas, W. H.	1,393 10 6
Evans and Felton, Oswestry (accepted)	1,389 10 0

PENZANCE.—For the construction of a sea-wall at the western promenade, for the Corporation. Mr. George H. Small, Borough Surveyor, Public Buildings, Penzance :—

Shaddock, J.	£13,500 0 0
Stephens, W. H.	11,075 0 0
Lang, J. C. and T. A.	10,600 0 0
Shellabear, George	10,200 0 0
Carkeek, A., Redruth (accepted)	9,866 0 0

PENZANCE.—For additions to Wesleyan school, Mr. J. W. Trounson, Architect, 27, Clarence-street, Penzance :—

Burnet and Trounson	£674 17 6
Burnet and Son	648 10 0
Walters, Rd.	654 12 6
Ford and Son	612 14 0
Trounson and Trythais, Belgravia-street, Penzance (accepted)	634 0 0

SPALDING (Lincs.).—For the erection of offices and shops in the Sheep Market, for Mr. Banks. Mr. William Jephson, Architect, 11, St. Thomas's-road, Spalding :—

Levesley, William	£865 10 0
Perkins, J. W.	557 10 0
Watson, C. A. (accepted)	490 0 0

[All of Spalding.]

STEVENAGE.—For the erection of new farm buildings at Stevenage, Herts. J. Randall Vining, architect and surveyor, 89, Chancery-lane, W.C. :—

Lawrence, W., and Son, Datchworth	
Stevenage	£1,707 3 6
Black, A., and Son, Forest-hill, London	1,610 0 0
Miskin, C. St. Albans, Herts	1,595 0 0
Warren, G., Stevenage, Herts	1,449 0 0
Redhouse, S., Baldock, Herts	1,430 0 0
Foster, M., Hitchin, Herts	1,390 0 0
Willmott, J., and Sons, Hitchin, Herts (accepted)	1,368 0 0

SOUTHEAST-ON-SEA.—For the execution of street work, St. Vincent's-road, and others, for the Corporation. Mr. H. Harlock, Borough Surveyor, Clarence-road, Southend :—

	road.	Hamlet- road.	path.
Wilson, Geo.	760 0 0	127 12 0	184 13 0
Hobman & Co.	617 0 0	103 10 0	167 0 0
Griffiths, W.	679 0 0	117 0 0	129 0 0
Fry Bros.	813 6 5	129 8 11	191 12 2
Jackson, J.	666 0 0	119 0 0	160 0 0
Iles, E.	614 0 0	107 0 0	147 0 0

STAINLAND (Yorks.).—Accepted for alterations, &c., to Providence Independent Chapel. Mr. B. Stocks, Architect, St. Peter's-street, Huddersfield. Quantities by Architect :—

Helliwell, John, Stainland, excavating and masonry	£267 0 0
Wood Bros., Huddersfield, carpentry and joinery	1,060 0 0
Jagger, S. & W. H., Elland, plumbing and glazing	84 19 0
Collins, S., & Son, Stainland, plastering	98 0 0
Lunn, Haigh & Shaw, Huddersfield, painting	83 19 0

SPHINCTER WORKS, EMERSON STREET, LONDON, S.E.

High Grade Flexible Hoses for
Contractors, Engineers, Builders.
FIRE HOSES & HYDRANTS.
HOSES FOR CLEANSING WITH WATER POWER.

Pumping, Suction, & Dredging Hoses.
Always specify "SPHINX" Brand.

The Builders' Journal.

Vol. I., No. 26.

Tues., August 6, 1895.

ILLUSTRATIONS.

A Wrought Iron Grille: Designed by Romaine-Walker and Tanner 401
The Staircase, Gosford House: William Young, Architect 403
A Sketch: By F. T. W. Goldsmith 405
New Shoreham Church, Arch and Pier, North Side of Nave 407

Mr. Edward Onslow Ford in His Studio 409
Design for a Village Church, Plan and Section: By Æsthus 412
Design for a Village Church, South and West Elevations: By Æsthus 413

CONTENTS.

Professional Jealousy 401
Art in the Service of Religion 401
New York "licks" Civilisation! 402
English and French Cathedrals: A Contrast 402
An Old Glasgow Architect on Some Older Ones: By Thomas Gildard 402
Bricks and Mortar 404
Men who Build, No. 24.—Mr. Edward Onslow Ford, R.A. 408
The Glasgow Empire Theatre 408
Salisbury Cathedral 408

The Enlargement of Upton Asylum 408
The Chester Baths Competition 408
In Nelson's Country: A Memorial Restoration to the Hero of Trafalgar 409
The Verdin Technical Schools and Gymnasium 409
The Largest Graving Dock in the World... 409
Village Church Competition: The Assessor's Award 410
The Heaviest Crown in Europe 411
The "Wren" of Ancient Egypt: Senmut, the Architect, and His Queen 412

Master Builders Meet at Leeds: The New Form of Contract and the R.I.B.A. 412
Making Electricity: Niagara, Unlimited, 450,000 Horse-Power 413
A Big Work at Newcastle: Extending the Asylum 413
A Fire Resisting Tree 413
Professional Items 414
Society Meetings 416
The "Builders' Journal" Competition 416
Trade and Commerce 416

Professional Jealousy.

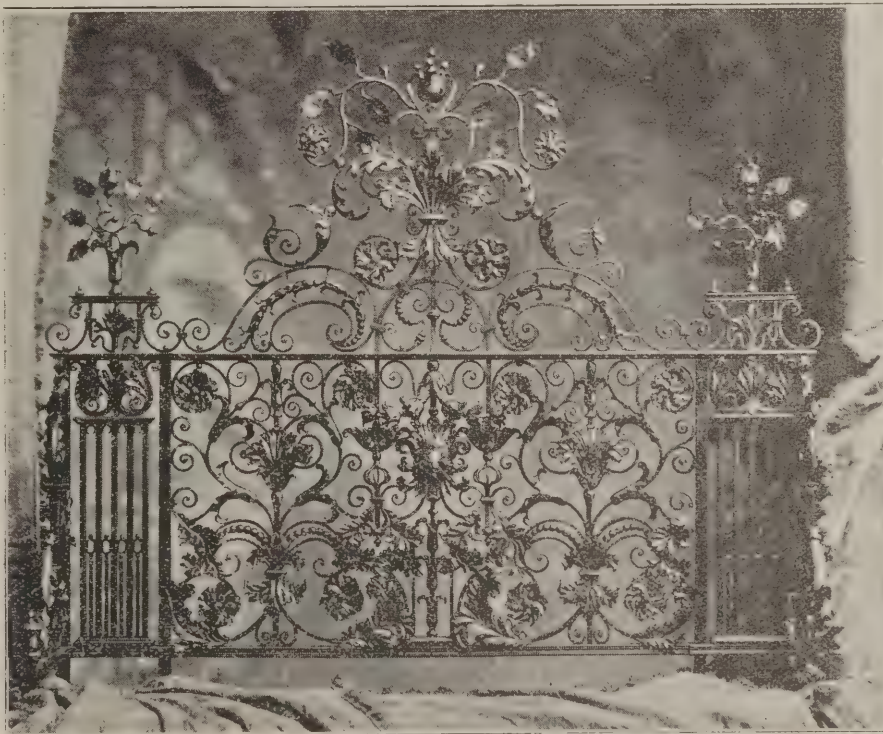
It wants someone versed deeper than we pretend to be in the extraordinary animosity shown by one section of the public Press to the conductors of another section, to discover the reason that no mention is ever made of the generosity of Mr. Passmore Edwards. As no competition exists between newspaper proprietors in the personal advance of charitable objects in which they themselves are the prime financial movers, the universal neglect to give a little passing credit to a creditable individual, is more strongly marked than it otherwise would be. Perhaps conscience makes cowards of them; perhaps their own hearts strike them dumb; perhaps there are reasons too deep for our penetration; but be these things as they may, here is one of their number daily spending large sums upon Free Libraries, Cottage Hospitals, and kindred institutions, and not a single "chirp" comes from his fellows in approbation of his splendid work. There is something radically wrong in the state of Denmark, for Mr. Passmore Edwards is distinctly a man worthy of better treatment. The income derived from his three principal publications, the *Echo*, the *Building News*, and the *English Mechanic*, must be very large, and we contend it to be a noble thing to devote the greatest portion of that income towards the establishment of institutions which shower lasting blessings upon one's fellow men. The Caxton Convalescent Home at Limpsfield, but recently completed, and not yet publicly open, is an instance of his generosity. For years the Committee of the Caxton Convalescent Home made repeated applications to printers and newspaper proprietors for subscriptions to build a Home for the particular benefit of the printing and allied trades. As many of these proprietors have made enormous fortunes out of printing and newspapers, it might have been expected that they would have

cheerfully responded to the appeal. They did not. But Mr. Edwards did; he, furthermore, undertook, solely at his own cost, to build the Home, although he declined the honour of laying the Foundation Stone for fear of "chilling the zeal of some newspaper proprietors and Press writers." The building being complete, the donor last week was requested to "open" it, and in again declining any function but that of having dipped his hand deep into his own pockets to provide the entire costs of the contracts, Mr. Edwards deemed it in the

there are thousands of disinterested individuals who will remember his noble generosity and keep that remembrance green

Art in the Service of Religion.

"We had left behind us the unhappy days when men were content to dwell in Palaces and worship God in Barns," said the Archbishop of York at Lichfield last week. There had been a dedicatory service in the Cathedral, and Dr. Maclagan was back in his old diocese. Yes, we have certainly left behind us the days when men, speaking generically, ever dwelt "in Palaces," if, indeed, *men* ever dwelt therein, which we question. Ten minutes by rail in and out of any one city will convince you, if you need convincing, that men are now content with rectangles and a plain roof. Round the heart of each city a great layer of soulless block-building lies, choking and throttling the light of day and all human aspiration, until the suburban villa breaks in, with its all too trim strippy garden growing ten feet high Sunflowers, or ten pennyworth of Stocks. In leaving our "palaces"—we should like to ask the Archbishop what epoch in the country's history he has studied?—we have certainly tumbled into the jail of the jerry builder; these weary, close-fisted buildings, all red and hot to the eye, and signifying nothing save pounds, shillings and pence. We worship in fine and lordly fabrics, as is right and reverential, but why—*why*, we repeat, do we bestow all our Art upon the ecclesiastic side of Religion; throwing up a tower here or a transept there, in the puerile belief that by this means you exalt and purify the slum? Church after Church seems to us (and we are all too familiar with the congestion of the large towns in England and abroad) but as the wreck, the hull, of a once proud vessel, battling against wind and weather, time and tide. The cohorts of the common-place are around, and a beautiful



WROUGHT IRON GRILLE: DESIGNED BY ROMAINE-WALKER AND TANNER.

interests of the Institute that someone else should perform the ceremony. "The 'policy of silence' shown towards me by the London Press," he writes, "when I take a prominent part in commencing or opening institutions I may have provided for human benefit, might, if I complied with your request to open our Caxton House, militate against its prosperity. When it is opened for the special benefit of London printers, it is hoped that London newspapers will give it becoming publicity. Whether they do or not, Mr. Passmore Edwards may rest assured

Church but emphasises, like a bas-relief, the vulgar, the sordid, the surrounding mean. There is—we are prepared to argue it against prelates—a *Domestic* side to Religion; it has its analogy in Domestic Architecture; roughly speaking, it is Home. We want the Home extolling from our pulpits; the ceaseless cry for the Beatitudes should begin there. The tendency is all too strong towards demarking more and more the spiritual from the temporal, and the Archbishop of York would have done well to tell his hearers that you can worship in a building wherein you *happen also to dwell*. In the fierce days of Christianity, God was worshipped "in barns"—the religion of Christ began beside the manger—and worshipped there with a strength and a sublimity that is lacking in these days. One great and mighty fane—splendid as it is, a heritage as it is in our belief—is not leaven enough for the lump of a large and squalid city. We want Religion and Art to ally themselves in the common ground of daily life, a rough meeting place, a battle ground, certainly; but no fight could be finer than these on the one hand and the depressing Utilitarianism and dangerous Unidealism of the Hour upon the other. A little Domestic Art—and Architecture; yea, even Religion. A Cathedral makes a fine watch-tower, but you must have also the battlements and the fortresses of your City. If Religion would be a real power it must buttress and fortify itself in the homes, not in the Minsters, of the land.

New York "licks" Civilisation! Recently the Legislature of the New York State appointed a Committee to inquire into the condition of the tenement houses. It included many public men of the highest repute, among them Mr. Richard Watson Gilder, the editor of the "Century" magazine. The Committee drew up a number of recommendations which subsequently became laws. Small parks and public playgrounds were established on the overcrowded east side of the City. The number of sanitary inspectors was increased, and a sanitary police specially organised. Light and air were let into the stifling basements. Due safeguards against fire were provided in existing tenements. Owners of insanitary property were rendered personally responsible for its condition. Regulations were made for the improved construction of future dwellings, and, in short, the whole subject was dealt with on the principles of humanity and of common sense. The Committee found a fearful state of things when they began their inquiry. New York beats creation in density of population, in the whole area below the Harlem. The rate is, or was, 143 persons to the acre. In parts, of course, matters were ever so much worse. The Eleventh Ward measures 32 acres; and on every acre there were, in June last, 986 souls. Bombay has but 759 to the acre in its most forlorn slum. The Josefstadt of Prague, which is about our highest possible in Europe has but 485 to the acre. The tenement houses burn like paper when they catch fire. They often catch fire, and their miserable inhabitants are roasted wholesale. Many of these people are foreigners; no other city in the World has so large a foreign population. Nearly half the number of New Yorkers, at the time of the census of 1890, were foreign born. That America "licks creation" is a time-worn boast; we would suggest that "Civilisation" be nearer the mark.

It is telegraphed from Cape Town that Parliament has passed the Bill for the construction of a railway to connect the southern and western parts of the Colony with the eastern frontier.

ENGLISH & FRENCH CATHEDRALS.

A CONTRAST.

ENGLISH Gothic Architecture as shown at its finest in our Cathedrals, was treated somewhat cavalierly some years ago by Professor Moore, of Harvard, who thinks that we never caught the full meaning of Gothic Art. An article in the *Atlantic Monthly* for August, in which an American Architect contrasts the Cathedrals of England and France, shows that all Professor Moore's professional colleagues do not share his indifference to Gothic outside France, where "alone do we find the whole structure of a Cathedral and fully organised and visible framework which the wealth of applied ornament only serves to emphasise." Mr. Peabody, the writer, of course notices that the apsidal east end of a Cathedral is almost unknown here save at Westminster Abbey, though Norwich, Peterborough, Lichfield, and Canterbury have circular ends, while, on the other hand, the square east end, almost universal in England, is found abroad only at Laon, of which we recently gave a description, and a few lesser places. Then, again, the English Cathedral is low and long rather than narrow and lofty in its proportions. The splendid Western Front at Wells is 31 ft. wider than that of Amiens, yet it is only half as high; and "the Nave at Wells is but twice as high as it is wide, while that of Amiens is three times its own width." Yet, "by a strange contradiction," Mr. Peabody is ready to admit, "there is nothing about these English Churches carried to a greater degree of perfection or which brings them greater glory than their "clustered Towers and their groups of heaven-sent Spires." The English Architect clung firmly to the belief that a Central Spire, combined with the Western Towers, would produce a more pleasing effect than those Towers alone, as the French designer thought. The result is that "no French Church possesses a single Central Spire to compare with that of Salisbury or of Norwich," though "the Western Towers of the great French Cathedrals, taken by themselves, are more grand and stately structures than similar features in England." The rich mouldings and clustered piers of early English Gothic contrasts with the plain capitals and simple shafts of the same age in France. English Sculpture was developed more regularly, and from the first, in all but the figure, could bear comparison with the best French work. Taking up one point after the other in this way, Mr. Peabody makes it clear that the difference between the Cathedral builders of mediæval England and France was principally a matter of temperament. The French Architect always kept in view the great principle of Gothic Art, which, in Freeman's words was "an upward tendency of the whole building and of its minutest details." He delighted to exhibit his constructive skill in lofty Naves and Arches, in "a brilliantly conceived framework of pier and vault, of buttress and pinnacle." On the other hand, "the Frenchman," writes Mr. Peabody, "never formed such harmonious features of Church and scenery as one sees at Salisbury and Lincoln—never massed Spires in such gracious composition as we find at Lichfield and Lincoln." English Gothic in fine has its own place, though not perhaps the first place, in the master Art.

THE Blackburn Free Library has been reopened, after undergoing considerable alteration.

AN enlargement is about to be made to the Wesleyan Chapel erected at Lindley, Huddersfield, in 1867, of which the estimated cost is £1,500.

We regret to record the death of Mr. George Knowles, F.R.I.B.A., formerly in practice at Bradford as an Architect and land agent, which took place on July 26th at Moorhead House, Shipley, Yorks, in his eighty-first year. He was for many years the head of the firm of Messrs. Knowles & Wilcock, in Leeds Road, Bradford, his works including the Town Hall at Guisely, the Institution for the Blind at Bradford, Westgate Ragged Schools, and Manningham National Schools. He had been a member of the Royal Institute of British Architects since 1862.

AN OLD GLASGOW ARCHITECT ON SOME OLDER ONES.

BY THOMAS GILDARD,

HONORARY MEMBER OF THE GLASGOW ARCHITECTURAL ASSOCIATION.

III.

THE Hunterian Museum was a perfect model in Roman Architecture, and, severely purged of its vulgarities, was an exquisite study of all the best qualities of the style. The portico was Doric, and the general building, square in plan, was crowned by a Dome of comparatively flat outline. But modern utility respects not beauty. *Utile et dulce* are divorced, and the Hunterian Museum, under the shadow of the University, had to yield to the stronger and more respected force of a Railway Station. And it seems within the fitness of things that the Juggernaut wheels of the steam-engine should have crushed out of existence one of the chief ornaments of that University which to the illustrious Watt had given encouragement and protection. I heard the late Mr. Mossman make a suggestion that the Museum might be rebuilt as a Shelter-House in the South-side Park, but whether or not this suggestion was put before the Parks Committee I know not. Stark was likewise Architect of the Gallery Front and the canopied Pulpit that, until lately, were in Glasgow Hie Kirk. One of Stark's pupils was Playfair, of Edinburgh. Stark, it may be said, was not a Glasgow Architect, but his grand contributions to our city are for this brief notice, I think, a sufficient apology.

John Herbertson had in early life been in the office of David Hamilton. While in business on his own account he was for many years Architect to the Prison Board of Lanarkshire. In St. Columba Church, Hope Street, he introduced somewhat of a novelty—the elevation of the part of the area beneath the Gallery two or three feet above the general floor level, access being had from a plat on the stair to Gallery. The effect is good, and those farthest from the Pulpit benefit by the eye-line given by the greater elevation. John Carrick, John Baird and Alexander Munro were successively assistants in Mr. Herbertson's office, and James R. Napier, son of the eminent engineer and shipbuilder, and who became a Fellow of the Royal Society, learned in it Architectural drawing.

My predecessor as an apprentice was Charles Wilson, but a few years elapsed between his giving up his drawing-board and my taking possession of it. He was a favourite pupil, and was in the office while Mr. Hamilton was engaged in much of his best work, he remaining some years beyond the expiry of his apprenticeship, yet, when in business for himself, he was no follower of his master. If a chief element in Hamilton's genius was masculine vigour, Wilson's was characterised by feminine elegance. We have examples of this in such buildings as the Hall of the Faculty of Procurators, the High School and the Free Church College, with its Church. In all these there is great refinement and delicacy and much charm of composition. I know few things more satisfactory in the way of an Architectural prospect than the Faculty Hall as it may be seen from the south-west shortly before sunset. The building is certainly not without defects, such as coupled columns—a corruption which even the great name of Wren fails to honour,—and these columns engaged with the walls; but its general proportion, its harmony of parts, and its quiet easy elegance of manner, compensate in a great measure for violations that are perhaps only known to, and seen by, the old-fashioned critic. In the Gallery of College Free Church there is an out-of-the-common arrangement. The Gallery staircase does not lead, as is usual, to the level of the backmost seat, necessitating from this a descent to the level of the lowermost, but stops short at the level of the second lowermost, introducing to a passage which feeds the two lower seats, and whence arise steps to the higher. To this arrangement there is one objection. It defines a social distinction, and of this we have enough otherwise in Churches professing the worship of the one Father. In one of Mr. Wilson's works he showed the influence of his master, the Gateway to the

Southern Cemetery. The detail is almost exactly the same as that of Lennox Castle. He had not the training of a Gothic office, nevertheless he used Gothic with appreciative skill in several of the Disruption Churches.

An early work was one of considerable importance, Gartnavel Asylum. In this he showed not only common sense but common honesty in not wasting money on useless details, useless as "a joy for ever" to the unfortunate inmates, and useless to a building that by the general public could be seen only from a distance. After maturing the plan, he gave his chief attention to the composition, the grouping, the massing, the sky-line, and the light-and-shade resulting from the alternation of projection and recession. The elegant range of residences which the West End Park bears as a coronet, and the great granite staircase leading to it, are evidences of the delicate yet healthy spirit which in Wilson's work is a principal characteristic. Mr. Wilson was an Architect whose works can always be looked on with pleasure by the ordinary beholder, and with profit by the intelligent student. For some time he had as partner his brother John,

vigorous, as in the United Presbyterian Church at the corner of John and Cochrane Streets. Its stylobate story is rich and massive and the contour of its mouldings, as of those of the whole structure, show the firm and easy pencil of a master. The Ionic Colonnade which it carries, is, however, not so satisfactory. The intercolumniation is filled in with glass, and it was possibly expected that by this, as it is transparent, the columns would have been emphasised with a certain resemblance of relief. We can easily imagine what would have been the effect of somewhat of a recess welcoming the deep soft shadows of the summer setting sun. A similar boldness of conception and vigour of execution characterise, with "jutting, frieze, and coigne of vantage," the magnificent building at the corner of Nelson Street and Trongate. It is the same with the Wallace Monument and many of his Mansions. Were we to judge by only the Unitarian Chapel, we would say that the Greek Graces seemed to keep themselves aloof, but for a Picture Gallery and a School of Art in Greek Doric which he designed for George Square, they happily waited upon him in

"Dictionary of the Architectural Publication Society." Our recent president, Mr. Douglas, was one of his pupils.

The Architect, in some respect, of perhaps next importance to Mr. Hamilton was Mr. Baird—there were two Architects in Glasgow of the name of John Baird, their periods of practice over-lapping—the before-mentioned and he who was assistant with Mr. Hamilton—a gentleman who enjoyed a large practice, and a very large measure of the esteem of his fellow-citizens. Although his practice was extensive, somehow he has left to us few important public buildings. One of his best was one of his earliest, the Wellington Street United Presbyterian Church. This building is a square box, with a Portico at one end of it, a form of Church with which, in our own day, we are not wholly unfamiliar, a simple enough composition, yet how rarely successful. In this Church are to be seen several of the best qualities of Architecture—proportion of harmony, a sense of breadth and repose in the general effect, and a sympathetic feeling with this in all the details. The Portico is part of the structure, is not stuck on, and has little



THE STAIRCASE, GOSFORD HOUSE : WILLIAM YOUNG, ARCHITECT.

but John's must have been "a back seat" in the business. Charles's name appears twice in the "Architectural Publication Society's Dictionary"—in its own place, and in the article "David Hamilton."

As I have said, Mr. Rothead had been about six months in Mr. Hamilton's office when I entered it, leaving it immediately after having taken the first (a fifty pound) premium in a competition for a Church in Ireland. He was an Edinburgh man, a pupil of David Bryce, and was intimately acquainted with all the detail of George Heriot's Hospital. He was eminently a picturesque Architect, although Queen Margaret College and Buckingham Terrace attest his mastery of the best phase of Italian. His Saint John's Free Church, was an early experiment in Gothic, and enjoyed much popular admiration, but in those days of the Gothic revival we were thankful for small things. His Park Church, however, shows him in that style in the fulness of his power; while in the Later Italian, as chastened as was latterly his apprentice-master, he was in that variety of the style more directly descended from the Roman, exceedingly bold and

all their native purity and dignity. These buildings, with an open Colonnade abutting upon the Scott Monument, and rising no higher than its Pedestal, would have been a great ornament to the Square, and would have in nowise interfered with the thoroughfares designed by Mr. Carrick. In the dual competition for the India Office and the War Office, he occupied the same position as did Sir George Gilbert Scott—he gaining the third premium for the one and Sir George for the other. He was a man of indomitable energy; in the more picturesque styles he had a most fertile fancy, and, if not much of a colourist, was a splendid draughtsman; in ornament, bold, vigorous, and sweeping. Conscious of power, which he could readily wield by his facile draughtsmanship, his high ambition would have undertaken such works as Westminster Palace, the London Law Courts—even Saint Paul's Cathedral. It might almost be said of him, as Dr. Johnson said of Milton, "his was a genius that could cut a Colossus from a rock, but could not carve beads out of cherry-stones." His name has secured a place in Irving's "Dictionary of Eminent Scots," and in the

stuck up to it. The Church has, within the past few years, been metamorphosed by Mr. Burnet into a Music Hall, and whatever he may have done with the interior he has with the exterior had the good sense to let well alone. One of Mr. Baird's latest works was that extensive range, the Macdonald Warehouses, with elevations towards South Hanover and Ingram Streets and George Square. These elevations are treated with, for Mr. Baird, singular freedom, a freedom, however, to which there is no sacrifice of law or dignity. One of Mr. Baird's chief employers was Sir James Campbell, and for him he designed the stately range of buildings in Buchanan Street, immediately north of the Arcade. Sir James employed him also on his firm's Warehouse in Ingram Street, but, when he wished the style to be old Scottish, Mr. Baird recommended that the elevations should be by Mr. Billings.

(To be Continued.)

A New Home for Waifs and Strays is about to be erected at Cullercoats, near Newcastle-on-Tyne, for which Mr. W. Lister Newcombe, of Newcastle, is the Architect.

Bricks and Mortar.

TALBOT HOUSE, ARUNDEL STREET,
August 6th, 1895.

"I know what it is to live in a cottage with a deal floor and roof, and a hearth of mica slate; and I know it to be in many respects healthier and happier than living between a Turkey carpet and a gilded ceiling, beside a steel grate and a polished fender. I do not say that such things have not their place and propriety; but I say this, emphatically, that the tenth part of the expense which is sacrificed in domestic vanities, if not absolutely and meaninglessly lost in domestic discomforts and incumbrances, would, if collectively offered and wisely employed, build a marble church for every town in England; such a church as it should be a joy and a blessing ever to pass near in our daily ways and walks, and as it would bring the light into the eyes to see from afar, lifting its fair height above the purple crowd of humble roofs."

—JOHN RUSKIN.

THE season of the Royal Academy closed last week. It has been an average season from the point of view of the flow of shillings, but it must be called disappointing from that of the artists, many of whose works remain unsold. Prices, regulated by an instinct in advance, ruled low as well, though, of course, the biggest painters claimed and got their own. What, however, pays the Royal Academician best is the work which he executes, like portraits, on commission, and every Academician now goes in for portraits.

MORE than once during the last months of the late Parliament murmurs were raised in the House of Commons at the way in which the site of Her Majesty's Theatre, in the Haymarket, was allowed to remain. Various plans for filling the huge gap have been considered, among them being the erection of a vast Hotel, "upon American lines"; but it may be well to recall a practical suggestion, made some time since by Dr. Sclater, the Secretary of the Zoological Society of London. In his idea, the site could best be devoted to housing the Royal Academy of Arts, the space thus set free in Burlington House being given up to Science. How far the Academicians would like such a change is not open to much doubt; but it is to be remembered that at this moment there are at Burlington House, in addition to the Academy, the Royal Society, the Society of Antiquaries, the Royal Astronomical, Chemical, Linnæan and Geological Societies, and the British Association. The last named has not for any great length of time had permission to occupy the apartments over the gateway, and the whole building is now in use. Most of the newer scientific bodies are merely offshoots of the parent societies, and it might appear undesirable from several points of view to establish them in the privileges of older foundations. Among them, perhaps, the only one having any distinct claim to benefit by such a displacement of the Academy as is suggested is the Royal Geographical Society; but, if the Haymarket site could be devoted to some such purpose as is suggested, it would be a distinct public gain.

PROFESSOR HERKOMER, at the National Eisteddfod of Wales, simply "slaughtered" the Art Section, upon delivering the adjudication. He said that the Arts Section showed a very bad face. It was next to disaster. He was telling them the plain truth in simple English. Now this Art Section was a matter which they must really consider very seriously by next time. The Eisteddfod was a gigantic machinery for encouraging intellectual effort, and he wanted to see the talent brought out not only in Art but also in the minor and applied Arts, but they had shown nothing in Art. How was that? Was it because they had no talent? No, he could not believe that. They had only to encourage it. He had awarded first prize to "Hand and Heart," and the second prize to a man whose name was Haggerty. In the "Animal Painting" only a donkey's head had been sent in, and that was not a good one.

With regard to the water colours, the first prize was awarded to "St. Cuthbert," the second to "Ccherzando." In the Pencil and Crayon Section he awarded the first prize to "B. W.," but he could not award a second prize. The painting upon porcelain was a most feeble thing. The Sculpture was the most deplorable of all. He gave the prize to a chimney-sweep. At least, it was a head that looked as if it had been up the chimney. There was no prize in the Modelling in Clay, but he had raised the prize in Wood Carving to £6. The Art Modelling was disgraceful.

THE students of the Glasgow School of Art have again been very successful in the National Competition at South Kensington, 43 awards having been obtained, as against 35 last year. They comprise 1 gold medal, 4 silver medals, 10 bronze medals, 19 national books, and 9 prizes for sets of works. The gold medal is gained for Architectural design; the silver medals for modelling design, modelling antique, Architectural design, and life studies; and the bronze medals and national book prizes are for ornamental design, modelling, Architecture, and painting. The awards for Architecture are the highest for the Kingdom. The following are the prize-takers:—Gold medal—Albert H. Hodge; silver medals—Andrew Allan, John Moffat, George A. Paterson, George Smith; bronze medals—James B. Fulton, John G. Gillespie (2), Albert H. Hodge, John P. Main, Charles J. Menart, Bessie M'Elwee, Annie L. M'Geehan, George A. Paterson, Harry P. Sharpe; national books—Lizzie Bell, Emmet Brady, John Brown, Florence Faill, Helen J. Findlay, James B. Fulton, Andrew Law, Wm. Lucas, John Moffat, George Munro, Henry M'Affee, Lizzie G. Naismith, George A. Paterson (2), Donald M'K. Stoddart (2), George E. Walker, Robert Whyte, Marion H. Wilson; prizes for sets of works—Margaret P. Cameron, Alex. M. Gardner, Alex. Jamieson, David G. Miller, Peter S. M'Lauchlan, Norman A. M'Lean, David N. Rollo, Andrew Rollo, Wm. Smith.

ONE of the most interesting so-called haunted houses in England is Ewanrigg Hall, near Maryport, in Cumberland. It belongs to the Christian family known to fame in connexion with the mutineers of the *Bounty*. But its chief attraction to the visitor lies in the fact that it is the original of Limmeridge House, introduced by Wilkie Collins into his masterpiece, "The Woman in White." Collins and Dickens knew this neighbourhood well. Ewanrigg Hall, with its estate of over 600 acres, has just been offered for sale by auction by order of the Court of Chancery, but no purchaser was forthcoming.

SMALL in itself, but of great importance and value was the Geographical Exhibition temporarily arranged for the members of the Geographical Congress by the authorities of the British Museum, who are prohibited by law from allowing any part of the national collections to leave the precincts of the Museum. The privilege of seeing these treasures was highly appreciated by the specialists in historical geography and the history of discovery. The Exhibition, divided into two sections, consisted of early manuscript maps, Portolani, engraved maps and atlases, arranged in the Department of MSS.; while the second section was brought together by Sir Wollaston Franks, in his Department of Mediæval Antiquities, and comprised astrolabes, many of them possessing great historical interest as being connected with celebrated personages, quadrants, sun dials, &c. That the astrolabes made in the East as early as the Eleventh and Twelfth and Thirteenth centuries are remarkable for their workmanship and accuracy there is plenty of evidence to show. Take, for instance, the Saracenic Planispheric Astrolabe, made at Cairo in A.H. 638 (= A.D. 1240) inlaid with silver and copper. When one remembers the imperfection of the tools with which an astrolabist of that period must have worked it is a matter for wonder to notice the multitude of exact lines produced and the accuracy of the result achieved. Several of the quadrants exhibited were designed for English sovereigns, notably those of Richard II. and Edward VI.

THE Duke of Westminster, as President of the National Trust for Places of Historic

Interest or Natural Beauty, addresses a letter to us in which he makes an appeal to all visitors to Scotland who may take a trip to Loch Ness, and who care for the beauties of the Highlands, to join in a protest against the desecration of the well-known Falls of Foyers. The Duke observes: "Workmen are at present employed at Foyers in making a Tunnel from a point above the upper fall to a point below the lower fall. Through this Tunnel the whole of the waters of the Foyers river will be conducted, for the purpose of manufacturing aluminium by means of electricity, so that, as the agent of the Aluminium Company humorously states, 'The Falls will not be injured, only there will be no water in them.'" It is sincerely to be hoped that by October, when the final decision is to be taken, such an overwhelming public opinion will have been brought to bear in favour of preserving the finest waterfall in the United Kingdom that even the Inverness-shire County Council will begin to value its magnificent cataract.

WRITING with reference to Sir Arthur Blomfield's report on the danger to the Spire of Salisbury Cathedral, "The Salisbury Journal" says:—As originally reared, the Cathedral of New Sarum was destitute of this crowning grace. Added by a bold after-thought on the part of some great Architect of the fourteenth century, whose name is lost, Salisbury Spire has now continued to lift itself for half a thousand years. But Salisbury Spire, though one of the most graceful fabrics that the hand of man ever wrought, is also one of the most daring. The sub-structure on which the Spire and the upper part of the Tower rest was not intended by the original builders to bear such a burden—gigantic as glorious. We need hardly remind our readers that the Early English Cathedral Church of which Bishop Richard Poore laid the foundations in 1220 included only the lower part of the Central Tower, originally constructed as a lantern. A hundred years later—in the reign of Edward III., and while Wyvil was Bishop of Salisbury, it was the good fortune of the Cathedral to be crowned with its noble Spire by some unknown Architect. With the insight of true genius, he grasped the opportunity transmitted to him by his thirteenth century predecessors, and carrying the Tower to a greater height, ventured to place on it a lofty Spire.

BUT, like some other men of genius, in taking advantage of the means afforded him for a display of his powers, he tried those means to the utmost. While he bequeathed the Spire of Salisbury to succeeding ages as an object of wonder, he also made it a treasure which was only to be preserved by the exertion of vigilance. That vigilance has, on the whole, been displayed; but as Sir Arthur Blomfield's report shows, it has not always been well directed. The numerous iron bands, rods and ties which have been introduced from time to time, with the object of strengthening the fabric, have often done more harm than good; the destructive agencies of wet and frost have been at work from year to year and from century to century; and the tremendous thrust of the Spire has never ceased its pressure, which is both downward and outward. This last element of danger cannot be removed or even lessened; but hitherto it has been encountered by a resistance that was strong enough to prevent a catastrophe. No doubt the genius who reared the Spire to its splendid height counted on that resistance being watchfully maintained; but the alarming discovery has now been made of a decay—apparently unsuspected till very recently—which has already become so threatening that, unless the damaged portions of the fabric are promptly and effectually repaired, the day may not be far distant when the beautiful Spire of our Cathedral will share the fate of other lofty Spires and Towers that have been laid in ruins. Here is a great work for Englishmen to do.

IN Frankfort-on-the-Main, where Goethe was born, and where the Goethe House is held in as great a reverence as at Weimar, there is to be an Exhibition of relics connected with the great poet. It is said that a large number of objects will be on view, hitherto wholly unknown to the public. Amongst them will be some of the numerous pictures—painted by himself—which

Goethe was in the habit of presenting to his friends. The greatest have their weakness; and it was Goethe's foible to fancy that he could paint. He was, in point of fact, one of the vilest daubers that ever spoilt a canvas with colours; but his pictures, if worthless in Art, are naturally interesting. We wonder, by the way, how much a picture traced authentically to Goethe's brush would fetch at a sale by auction in this country?

At a meeting of the holders of Founders' Stock in the Channel Bridge and Railway Company, the Hon Philip Stanhope, M.P., the chairman of the directors, read the report, which was in French, and stated that the studies which had been made from the plans of the Bridge, had undergone serious modifications in the last few months, under the direction of Messrs. Schneider & Co., of the Creusot Works, and M. Hersent, and these modifications had been submitted to the consideration of Sir Benjamin Baker, by whom they had been approved. It had been thought desirable to form a group of eminent contractors of public works in England analogous to that formed by Messrs. Schneider and Hersent in France, and negotiations were accordingly entered into in the course of the present spring with Sir John Jackson, who completed the Manchester Ship Canal and constructed the Tower Bridge, and who was probably the most efficient contractor of sea works now in England. Sir John Jackson, in a meeting with Messrs. Schneider and Hersent, in Paris, adhered completely to the plans proposed, and he had afterwards been in negotiation with one of the largest iron manufacturers in Great Britain, and had assured himself of their readiness to take part in the proposed undertaking. A demand for the concession was now before the Department of Public Works in France, by whose authority a commission had been appointed to examine the specifications. The adoption of the report was carried.

THE American girl artists, who throng the Art Schools of the Latin quarter, have now a delightful domicile in that historic neighbourhood. In the Rue Chevreuse, just a stone's throw from the well-known Art Schools of Colarossi and Delecluse, a charming old house with a garden, court, and balconies, with rooms overlooking the gardens, has been arranged as a Students' Hotel or Home. There are cosy, tastefully-furnished Drawing Rooms, a big Reading Room, well equipped with American newspapers and magazines, and Dining Rooms where meals are served at moderate prices at small tables. The larger Dining Room is charmingly decorated with a frieze. Each resident—and naturally the house is always filled to overflowing—has a tiny room of her own, for which she pays a sum ranging from about 10s. a month. A similar Hotel is greatly needed for the English and Scotch girls who form so large a majority in the Art Schools of the Latin quarter. Some two years ago a club for English girl artists was started in the Rue Notre Dame des Champs, but has ceased to exist.

BRISTOL will soon have an opportunity of witnessing the running of electric cars from the city to St. George and Kingswood. Up to about two or three months ago the Tramways Company had intended adapting the old line between West Street and the St. George's present terminus, but this would have had the disadvantage of incurring risks in connection with the old form of construction of T rails and chairs, which might not have been found sufficiently heavy to wear well under the strain of the electrical cars. Seeing, too, that the line would have to be pulled about considerably for the purpose of accurate gauging and making the electrical connections, the Directors, some two months ago, determined to lay down a new line, so as to give the girder rail a heavier form

of construction throughout from Old Market to Kingswood. In order to accelerate the construction the company called in the assistance of Mr. J. Clifton Robinson, C.E., upon whose report it had already acted in connection with the electrical scheme. Mr. Robinson at once advised that the Company should do the work itself, and held that it could be finished well before the Kingswood extension and the piece of line in Old Market Street, which had been contracted for in November. The organisation of the labour gangs was capitally arranged. Hundreds of men were taken on. The old line was removed and a new line, with additional doubling and complicated curves into the dépôt, all completed in six weeks from the date of breaking ground.

ALL the principal collectors of pictures have been again returned to Parliament. Amongst these we may mention Mr. John Aird, Sir John Pender, Sir Frederick Mappin, and Mr. Cuthbert Quilter. Amateurs and collectors in a smaller way are to be found in Sir Richard Webster, Mr. Joseph Chamberlain, Sir Charles Dilke, Mr. Hosier, Dr. Farquharson, and Sir

injured by the competition of Smyrna. What could once be sold (on the spot) for £31 a ton is now sold for £2 12s.; in London the price is £4. Yet the Turkish product is inferior in quality to that of Naxos, only the methods used with the latter are defective. Formerly the Greek Government prohibited the export of any emery which was not up to a certain standard of purity and fineness. When the last concession to the lessors ran out five years ago, quantities of inferior mineral were sent into the market and injured the sale of the Naxian product. But apart from this, the working of the deposits is still of the most primitive kind, and now that underground work must be resorted to, better skill and appliances are needed for success and for the safety of the workmen. The latter, however, are jealous of any interference with what has become an hereditary industry. They still build fires round the blocks of stone in which the emery is embedded as the best means of breaking them up. It is by the way a curious regulation imposed by the Government that the quarrymen must all be married. When Greece gets development in other things besides politics more will be made of the emery and the marble of Naxos; of the former there is estimated to be some 20 million tons in reserve.

A GREAT Exhibition, entitled the Millenium, is to be held at Budapest next year to commemorate the foundation of the Hungarian kingdom under Arpád 1,000 years ago. The Exhibition, which will be on a scale of great magnificence, is being organised under the auspices of the Emperor Francis Joseph, who, together with the Sultan of Turkey, and many other royalties, will be amongst the exhibitors. In connection with the celebration, the new House of Parliament, now being constructed at a cost of 16,000,000 florins, will be inaugurated, as well as numerous monuments and public buildings.

SHEFFIELD'S new Town Hall is proceeding apace, and the outward appearance of the structure will soon be a decided ornament in the neighbourhood of Fargate. A considerable amount of the internal structural work has been completed, and but for delay in selecting and putting in the furnishing and fittings some of the rooms would be occupied very shortly. This applies to those portions of the building intended for the use of the Town Clerk and his staff, the City Surveyor and his staff, including the Department for the Inspector of Weights and Measures, and the rooms for the Medical Officer of Health. Entrance to the City Surveyor's Department will be from Surrey Street, and the rooms will extend round the corner into Norfolk Street. Provision has been made for the City Surveyor and his clerical staff, the buildings inspectors, draughtsmen, and foremen, and there will also be a Waiting Room for the public. The Town Clerk's Department consists of rooms for himself and the Deputy Town Clerk and the members of the staff. The rooms for the Water Department and the City Accountant are not yet finished.

THE Column of July, in the middle of the Place de la Bastille, Paris, is frequently confounded with the grim old Fortress which was razed to the ground by the mob during the First Revolution, July 14th, 1789. Of that historic pile there, however, remains no memorial except the line of white tones on the west side of the open space, which trace its perimeter, and the mural inscription which is to be read on the wall of No. 3. It may be of interest to recall that the Pont de la Concorde was actually completed with the blocks of masonry removed from the site of the Bastille. The bronze Column of July is a monument which was erected nearly half a century after the Bastille was taken and destroyed.



SKETCHED: BY F. T. W. GOLDSMITH.

S. Montagu. Amongst the new members, the best known dilettante is the Hon. Massey-Mainwaring; but Mr. Horniman has collected at his suburban residence a so-called museum of curiosities.

THE Front of Lord Rosebery's house in Berkeley Square is now completed, and it forms a handsome addition to the Domestic Architecture of London. It is curious that the scaffolding, which has been up almost throughout the term of his premiership, should be demolished contemporaneously with his downfall from power. An augury might be used either way.

OF those familiar with emery as a polishing material, whether in the form of emery-paper or in the more solid form of grinding wheels, &c., probably few people could say offhand from what quarters the supply of it comes. Though known to the Greeks (who called it *Smyris*), its common use may be said to be quite a modern thing. For many a year the principal supply came from Naxos, the largest of the Ægean Islands, midway between Greece and Asia Minor. But the island of Ariadne and Dionysus has allowed its trade to be

AUTHORITIES differ as to the exact date when the great wall of China was built, but the consensus of opinion appears to be that it was begun at least in the reign of the Emperor Che-Hwang-Te, the founder of the Tsin dynasty, who ascended the throne in 231 B.C., and died 210 B.C. There does not seem to be any reason for doubting its actual existence. It is true that the late Carter Harrison, of Chicago, when visiting China in 1886, wrote home that he was inclined to look upon it as a myth. Subsequently a paragraph went the round of the papers, copied from the *Times* of August 5th, 1887, which attempted to show on the authority of Abbe Larrien that the great wall "does not and never did exist," that there are, indeed, "square towers of earth faced with brick, at considerable distances from each other, but these were never joined together by any wall as originally intended." This paragraph called out a lively controversy, which was settled in favour of the wall. Among others, H. S. Ashbee wrote to *Notes and Queries* insisting that he himself had seen the great wall, that he had climbed upon it, and, though he had never measured it nor travelled along it for any great length, he could bear ocular evidence that it extended from the point where he stood upon it in a straight line, unbroken save in places where it had been allowed to fall into decay, as far as the eye could reach in either direction. "While crossing the Gulf of Liao-Tong I plainly saw, from the deck of the steamer, where the great wall started from the sea. Further, in the same part of China, but unconnected with the great wall, I observed the square towers in question."

THE Monument erected in York Minster to the memory of the late Archbishop Thomson, will be unveiled next Friday. The ceremony of unveiling will be performed by the Earl of Crewe, after a service in the Choir of the Minster. The Monument consists of an exceedingly beautiful recessed Altar Tomb, designed by Mr. Rodley, with a life-size recumbent effigy by Mr. Thorneycroft. The site of the Monument is in the South Transept, just outside the entrance to the South Choir Aisle.

WHEN collectors of every class roam on the look out for neglected treasures, we may not hear of as many wonderful "finds" as those recorded in earlier times, but occasionally well-instructed experts are fortunate even now. Genuine Aldines are sometimes picked up in old book shops, manuscripts of historic value are now and then discovered among documents rejected as worthless, and ancient coins are of course frequently found. Quite recently M. Duez, the French painter, who is well known also as a collector with great judgment, was fortunate in meeting with an exceptionally interesting picture in a very unpromising quarter. In the neighbourhood of Honfleur, in Normandy, he recently saw a picture in very bad condition, but the experienced eye of the artist detected in it either the handiwork of a well-known master or of a very successful copyist. To the owner the picture was not more valuable than the frame, and M. Duez had no difficulty in getting it for 60 francs. It turned out to be, as the new owner had hoped, a veritable Murillo, and M. Duez has already been offered 17,000 francs for his lucky purchase.

CHARLES DICKENS' desk has been given by Mr. Bancroft to the South Kensington Museum, where it has been appropriately placed in the Forster Library. It bears the following inscription:—"This desk belonged for many years to Charles Dickens, and was last used by him a few hours before he died, on June 9th, 1870. His executrix afterwards gave it to Edmund Yates, at whose death it was sold by public auction on January 21st, 1895, and bought by S. B. Bancroft, who presented it to the South Kensington Museum."

AN interesting range of buildings is being demolished at Lindfield, near Brighton. The Schools and buildings established there by the Quaker philanthropist, William Allen, will soon be removed from the ken of the parishioners. This celebrity lived nearly a century too soon. It is on record that as early as 1823 he was

considering the best method of making an inroad upon the then demoralising system of paying agricultural labourers out of the poor rate, and he tried building Cottages for them and giving them some land. In 1824, while lodging in Brighton, he "went over to Lindfield to procure ground for the establishment of a School of Industry." In 1825 he erected commodious School Rooms for boys, girls, and infants, with Workshops adjoining. These are the buildings now being pulled down. To these Schools, lending libraries were attached. Some of the elder boys were engaged during a portion of the day on the School Farm, some in a printing office, and others in different kinds of manual labour. The girls were taught needlework and knitting, and the infants learned to make patchwork and to plait straw.

In Egyptian and also in ancient Mexican Sculpture, such attitudes of repose as squatting, kneeling, or sitting cross-legged, are frequently seen, but in Greek statuary very seldom. The Greek artists represent their figures resting on chairs or couches in the European fashion. In the crouching Venus, as Dr. Regnault and M. Lajard have recently pointed out, we have an attitude of action, not rest, as may be seen by comparing it with the Venus of Tanagra, a terra cotta figurine. The "Shell Venus" is the only Greek figure they have found on its knees, and they regard it as an archaic work.

A MEMORIAL to the late Randolph Caldecott, by Mr. Alfred Gilbert, R.A., has been placed in the Crypt of St. Paul's Cathedral, by the permission of the Dean. It is in proximity to the memorial to Mr. Frank Holl, R.A., another of Mr. Gilbert's works. Mr. Caldecott was born in 1846, and died February, 1886. He came into notice as an artist (1875) by his illustrations to Washington Irving's "Old Christmas." This, succeeded by "Bracebridge Hall," and the first of a series of coloured picture books made him more widely known. Amongst many works illustrated by him may be noticed "John Gilpin," "The House that Jack Built," "The Mad Dog," "The Great Panjandrum," with sketches of scenes in America, which he was preparing at the time of his death. The following is the inscription on his monument: "An artist whose sweet and dainty grace has not been in his kind surpassed; whose humour was as quaint as it was inexhaustible."

THE big Tunnel on the new Sheffield Extension line to London is near Rugby, and corresponds in some sort to the celebrated Kileby Tunnel on the London and North-Western Railway. Half-a-dozen shafts are sunk already, and six more are in progress. The material is good for working, and almost free from water. Stone is very sparingly used in the construction, Staffordshire blue bricks being found better. The new line will be remarkable for the rapidity with which it has been built, although its structure will be of great durability. In the matter of economy, both in first cost and in working, it will leave all other lines far behind.

SOME interesting reports from the British representatives abroad on the subject of light railways have just been issued. Their publication has been delayed owing to the despatches having been placed, in manuscript, at the disposal of the Committee of the Conference convened by the Board of Trade to consider the question of light railways and tramways. In Belgium there are seventy-five such lines extending over 836 miles. Of these, six belong to private companies and the remainder to the National Society of Local Railways. Dividends have been steadily increasing. In Prussia the light railways, or "Kleinbahnen," number thirty-seven, with a total mileage of about 480 miles. Of these the German Government says: "In general the light railway appears to be well adapted to the development and improvement of agriculture and forestry and their accessories, particularly to opening up new markets and facilitating the carriage to and fro of manure and raw produce over a considerable area of country."

MR. ROBERT CASSON, of Wallsend, has now in his possession 18 coins, recently found whilst

excavating the foundation of his new house, situated within the boundary of the ancient Roman Camp, Segedunum. The coins, which are supposed to be Roman, lay in a cluster, suggesting the idea that they had once formed the contents of a purse or bag. A copious spring of water has also been discovered in the foundation of the same house, an incessant stream of very cold water bubbling to the surface. On the workmen thrusting their bared arms down the cavity, pieces of ancient pottery have been found, which has given currency to the opinion that the water is rising from a Roman well. The members of the Newcastle Society of Antiquaries have been communicated with in reference to the discoveries.

ACCORDING to present plans, which are, of course, only speculative, the Canal which has been talked about between the Baltic and the Black Sea, will proceed from Riga and make use of the Rivers Düna, Beresina and Dnieper, ending at Cherson on the Black Sea. It is, properly speaking, only the connexion between the Düna and the Beresina which is to be a Canal. The whole length of this contemplated waterway is about 1,000 miles, the breadth at the top at the narrowest places about 220 ft., and at the bottom about 120 ft., depth everywhere 29 ft. The lowlying Pripjat bogs makes it possible to do away with locks, with exceptions of a lock at each terminus. The land through which the Canal will have to pass has at the top a thin layer of sand and black earth, and under this stiff clay, which is not only favourable for working, but lends itself admirably to the burning of the requisite bricks. There are projected harbours at a number of places. As it is proposed to start the work simultaneously at many different places, the time required for the completion of the Canal is only put at five years. The total expenditure, including the purchase of the requisite land, is calculated at £20,000,000.

THE new lava stream on Vesuvius has a frontage of more than 300 ft. and a height varying from 14 to 20 ft. or more. At one part the lava has piled itself up to a frightful height on the edge of a ravine, and the fear is lest it should give way and fall. The director of the Observatory caused a sort of dam to be built of scoriae, in the hope to turn the lava should it advance upon the building. Near the new crater, two little extra cones formed, from one of which is heard a constant whistle, like that of a locomotive. This is quite a new and curious phenomenon.

RAPID progress is being made with the Theatre that the Directors are building in the grounds of the India Exhibition. When completed it will be, it is stated, the biggest thing of its kind in the World. The span of the roof is 217 feet, St. Pancras Station being the only building in London that exceeds this span. As the cantilever system is employed, there is not a pillar in the vast auditorium to obstruct the view. Several novelties have been introduced to fit the Theatre for the special kind of performances that will be given. It has an Upper Stage 315 feet long and 100 feet deep working on trolleys, and a Lower Stage which will work over a broad stretch of water, thus permitting a water scene to be produced at short notice. There is seating accommodation for 5,000 people, in tiers raised proportionately above each other. The orchestra will be suspended from the roof. On a stage of these dimensions anything short of a grand spectacle would be useless.

AN interesting experiment has been inaugurated by the Technical Education Board of the County Council. The premises in Bolt Court, Fleet Street, formerly used by the Stationers' Company as a School, have undergone a thorough repair, and have been fitted up as a School of Photography. For the last two months evening Art Classes have been conducted under the control of the National Society of Lithographic Artists, and arrangements have now been made to commence a School of Photogravure and Half-tone Etching. These Classes will commence in September or October next, under the management of a Committee consisting of six nominees of the Lithographic Artists' Society and six nominees of the Board.

WHEN gas was first introduced it was thought marvellous that a flame could be kept alight without a wick, but the latest invention in gas-burners quite eclipses this, as it not only burns the gas, but actually makes the gas light itself. This invention, patented by Mr. J. F. Duke, and sold by the Duke Patents Company, 20, High Holborn, is pronounced to be one of the most marvellous subjugations of Science to domestic economy. It consists of just an ordinary gas burner with a small tube at the side. This burner is simply screwed into the bracket or other fitting, the gas turned on, and lo! in from six to ten seconds (for the air in the pipe to pass out), the gas lights itself. The action of the burner is simple:—The gas on issuing from the burner passes over a small knob of porous material impregnated with a rare and indestructible metal, which as soon as the gas passes over it becomes red hot; this red heat is communicated to a small piece of platinum wire which immediately becomes incandescent and lights the gas. This little black knob is practically indestructible, as is also the platinum wire. Therefore, as long as the burner exists, the gas on being turned on will light itself.

MANY of us visiting Brighton will miss the quaint front of the "Old Ship," believed to be the oldest Inn in Brighton, which has just been removed. One of the earliest allusions to the house is in the Court Rolls of Bright-helmstone Manor, which record an admission, on August 23rd, 1670, "to one Cottage or Inn, known as the 'Old Shipp,' situate in the Hemphshires of Bright-helmstone . . . in the tenure of George Hackett."

A QUESTION of great importance to those who contract with urban authorities has been decided by a Divisional Court in the case *The British Insulated Wire Company v. The Prescott Urban Council*. The contract was made originally between the Company and the Local Board, which, under the Act of last year, the Council had superseded. The plaintiffs carried out their contract and were partially paid. The action was brought to recover the balance due for the supply of electric light and for the price of some extras. It was contended by the Council that the contract was invalid as it did not comply with the requirements of section 174 (2) of the Public Health Act, 1875, which provides that every contract with an urban authority "shall specify some pecuniary penalty to be paid in case the terms of the contract are not duly performed." In the present contract there was no such provision, but merely a clause referring all disputes to arbitration. The Court decided against the plaintiffs. The omission of the penalty was fatal, and the agreement was not binding.

It appears from a report just issued that the Liverpool Corporation has acquired, subject to the approval of Parliament and the next meeting of the Council, for £400,000 the undertaking of the Liverpool Electric Supply Company. The Corporation will also pay any sum which the Company has expended on capital account for the benefit of the concern over and above its share capital. The report states, *inter alia*, that St. George's Hall, the Town Hall,

and other municipal buildings, which cost between £3,000 and £4,000 a year to be lighted with gas, will be supplied with electricity.

THE purification of the Clyde, in its present state the most formidable nuisance in Great Britain, is at length in a fair way to be undertaken by the Glasgow Corporation. The news is difficult to believe, for the Corporation has been considering schemes with that object since 1853. But one gathers that public feeling on the matter is now "ripe." This ripeness is coincident with a saving in tramway fares said to be equal, since the purchase of the Tramway Company's undertaking, to a rate of 7d. in the £, and with a reduction of 2d. per 1,000 feet in the price of gas. Moreover, a small experiment in defecation at Dalmarnock has yielded excellent results. The Corporation

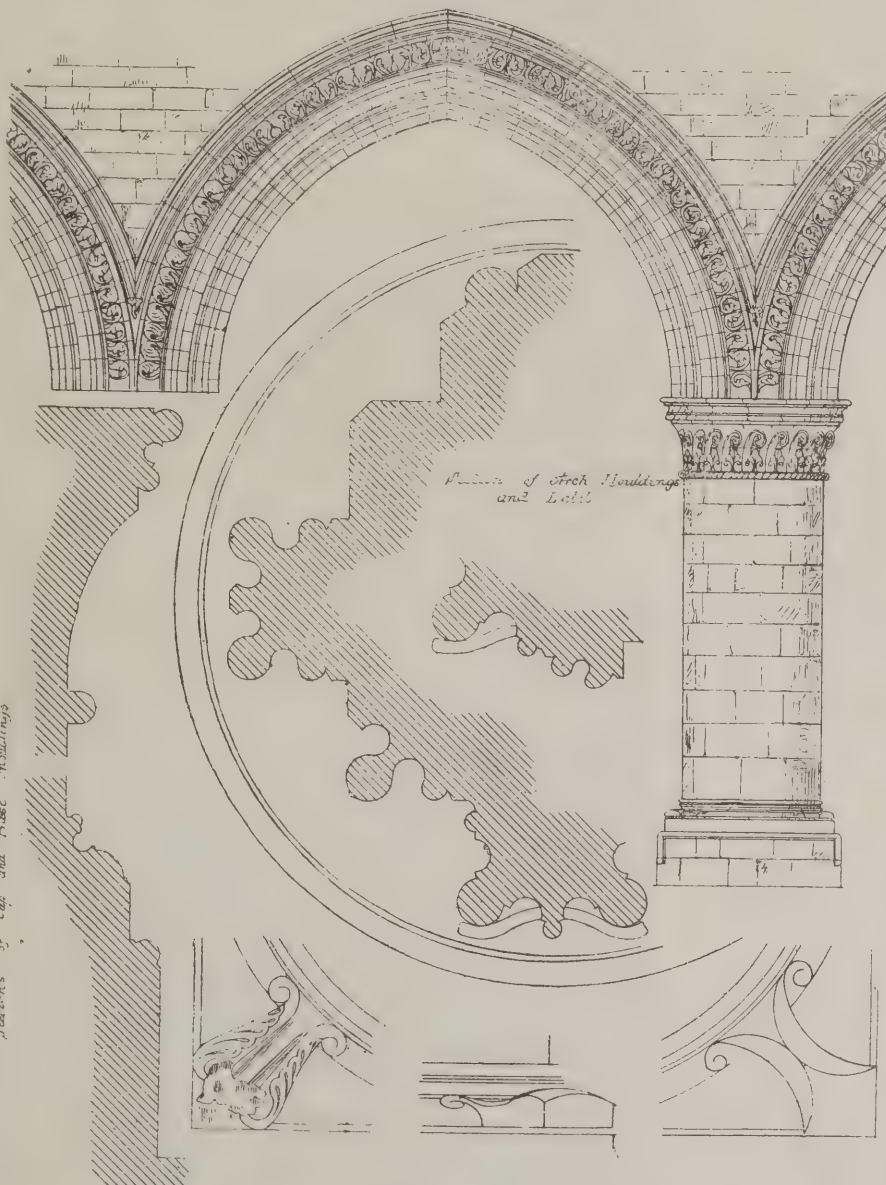
support, all fear of the stone falling has been removed. Fortunately the lord of the manor and the owner of the land (Sir Edmund Antrobus) is an antiquarian of no mean repute. He has given years of close study to elucidating the mystery which surrounds the origin of Stonehenge, and has done everything he can to promote the purpose of the antiquarian authorities; and, as a result, the stones are for the moment safe, and in no danger of falling. The antiquarian authorities, however, are keeping, in conjunction with Sir Edmund Antrobus, a close observation upon them, and there is now a properly-appointed attendant.

It is stated that the Duc d'Aumale is about to purchase the Château d'Amboise from his nephew, the Duc d'Orléans. It is the oldest of all the national castles, and is rich in historical reminiscence. Charles VIII. was born and died there. It was the scene of the butchery which followed the celebrated conspiracy of Amboise. From 1848 to 1852, it served as the prison of Abdel-Kader. Confiscated by the State after the fall of Louis Philippe, it was restored to the Comte de Paris by the National Assembly. Since then it has never been inhabited. It is in a dilapidated condition, and sorely needs restoration.

THE completion of the restoration of the beautiful Early English Doorway, leading to the Bristol Cathedral School, undertaken at the expense of past and present pupils of the establishment as a mark of esteem to the headmaster (Rev. H. W. Pate), was celebrated last week. The matter was mooted last October, and subsequently it was decided to proceed with the project. The Archway has been carefully restored under the superintendence of Mr. Pearson. Precentor Mann gave a few particulars of the Architectural features of the Doorway. The Doorway was Early English, or, if he might use what might seem to be a contradictory term, was late Early English. Critics pronounced it to be a very beautiful specimen of the period, with its graceful, slender shafts, surmounted by foliated capitals at the spring of the Arch, its deeply cut mouldings, and its remarkable cusplings. Originally the Doorway led down to the Refectory, which stood on the site of the School, before the then monastic establishment was turned into a

Cathedral. He was glad that such a fine specimen of Early English Architecture had been preserved as a lasting memorial of regard for their headmaster.

THE British Museum Report contains an interesting reference to a recent acquisition in the Department of Antiquities. This is a marble sepulchral stele of Athenian work of about 400 B.C., showing in relief a seated figure of a woman holding a casket, while before her stands a maid with an infant in swaddling clothes. The latter was found, of all places, in the cellar of a house in Jersey. This graceful work, as Professor Jebb lately pointed out, had had strange wanderings. Originally brought from Athens to Jersey, probably as part of a ship's ballast, it was taken to Inverness, and thence found its way to Bloomsbury, to join, we may add, two other Attic Stelæ.



NEW SHOREHAM CHURCH, ARCH AND PIER, NORTH SIDE OF NAVE.

seems thereupon to have received in a business-like spirit a memorandum of the City Engineer, showing how an extension of the same principle to the whole north side of the City, with a sewage farm of 237 acres at Dalmuir, might be accomplished at a cost of £600,000, which would involve a threepenny rate for thirty years. The only division of opinion was as to whether the south side should be dealt with simultaneously, or at least provided for at one and the same borrowing. This, however, has led to a short postponement of the matter, and may be a cause of further and longer delays.

We are glad to learn that the efforts of the members of the British Archæological and Antiquarian Associations to prevent the decaying process at Stonehenge have been successful. One of the outer stones has fallen out of position, but, thanks to a wisely-placed

AN ANNOUNCEMENT.

OUR NEXT ISSUE

Of August 13th will mark the beginning of our Second Volume, and will contain the first

DOUBLE INSET LITHO ILLUSTRATION.

The PRICE will NOT BE RAISED.

This number will also contain the first attempt to formulate the whole of the

CONTRACTS OPEN.

which we intend to make an ordinary weekly feature. This number will therefore be posted to every reputable Builder and Contractor in the four Kingdoms, and will, together with our large ordinary edition, possess a first Edition of

25,000 Copies.

"A WONDERFUL PERFORMANCE."

"'The Builders' Journal' is remarkable even in these days of cheap journalism. Issued at a penny, it nevertheless has all the appearance of a sixpenny illustrated journal. On its professional merits we are not competent to pass an opinion, but as a specimen of journalism we must say that it is a wonderful performance."—*The Literary World*, June 28th, 1895.

THE GLASGOW EMPIRE PALACE.

THE Glasgow Dean of Guild Court on Thursday approved of Mr. Frank Matcham's plans for the reconstruction of the Gaiety Theatre, which is to be converted into the Empire Palace. Operations will be begun in October.

SALISBURY CATHEDRAL.

AS a result of his appeal for funds to repair the Spire of Salisbury Cathedral, Mr. Hulse, M.P., has received the following letter:—"Foreign Office, Aug. 1. Dear Mr. Hulse,—Lord Salisbury desires me to say that he will be very glad to contribute the sum of £100 towards the restoration of the Spire of Salisbury Cathedral.—I am, yours very truly, (Signed) Schomberg K. M'Donnell."

THE ENLARGEMENT OF UPTON ASYLUM.

ON Friday, at Chester Castle, a Committee meeting of Visitors of the Upton Asylum was held, when the chief business for transaction was the consideration of the tenders received for the enlargement of the Asylum. The County Council on Thursday, at its quarterly meeting, decided to accept the loan of £80,000 by Parr's Banking Company and Alliance Bank, Limited, for the purpose of carrying out the work.

THE CHESTER BATHS COMPETITION.

ON Thursday afternoon, at a meeting of the Chester Baths and Boating Committee, the decision of Mr. Baggallay, Architect, of Conduit Street, London, acting as adjudicator on behalf of the Corporation, was made known respecting the plans for the extensive Baths for the city. There were twenty-nine competitive plans submitted, and out of seven set apart for final selection he gave his award in favour of Mr. Burgess, Architect, 33, Palliser Road, West Kensington, London. The Committee accepted the plans for the scheme, and the Council is authorised to expend a sum of about £8,000. The premium of £50 for successful plans was awarded to Mr. Burgess.

It is announced that Professor Judd, C.B., has been appointed Dean of the Royal College of Science, in the room of the late Professor Huxley.

RECENTLY was laid the Foundation Stone of a new Girls' School which is being built by the Managers of the Pontefract National Schools. The building will cost nearly £1,000, and will replace the inadequate premises at present in use.



MEN WHO BUILD.

No. 24.

MR. EDWARD ONSLOW FORD, R.A.



THE Academy has done well. It has taken unto its inner self the one remaining Sculptor, who will assuredly leave his mark upon the Art history of his age as deep and as lasting as English Art can tell of. Onslow Ford was not in your mind when a month or two back you wrote of the kindredship of the three

of Andrea Verrochio, Leonardo da Vinci, Raphael, and Angelo himself, all the Arts were in harmony and invariably combined in the same man. How, since then, Architecture came to slip away from the combination, to recede slyly, as it were, from the affections of her sisters, and to place her charms at the mercy of many heartless wooers, who have debased her and humbled her to the dust, is no matter here; we long for her retribution, and that it will come in the fulness of time we have no fear. But Onslow Ford has got near the Old-World accomplishment. He started life as a Painter, and his earliest memories lurk somewhere round Blackheath, where he gave up Greek and Latin for a surreptitious escapade with his pencil. Going with his mother to Dunkirk when he was only seventeen, an old Frenchman gave him his first lesson, and afterwards he passed eighteen months in a Flemish studio at Antwerp. From Antwerp he drifted to Munich, where he finally flung away the brush in favour of the chisel, and devoted



MR. EDWARD ONSLOW FORD, R.A., IN HIS STUDIO.

constructive Arts, and showed—poorly perhaps—in dealing with the work of W. B. Richmond, who, curiously enough, steps up into the ranks of the noble forty side by side with Mr. Ford, how much Architecture depended upon the painter and the sculptor for her own perfection, and how, in the tints

himself for a considerable period entirely to modelling.

Returning to his native shores with a wife and a strong determination to work for all he was worth at his second love, young Ford pitched his tents on the breezy stretches of Blackheath, where occasional murmur of a

commission reached him when he least expected it. At last—or many will think at first—came his chance, the Rowland Hill bust for the Guildhall, and as he happened to be "at home" when the fickle dame came tapping at his door, he invited her to enter, and from that hour the Canaan of an artist's ambition has beckoned him along the widening path of success. The Rowland Hill bust lacks the grace of his later work. The art of taking pains does not always make good Art, and perhaps least of all does it go to make good Sculpture. But if Onslow Ford laboured over his Rowland Hill work no whit more than he laboured over his magnificent Orchardson bust in the present Academy, you hold it truth that the advancement is the advancement of artistic genius, and in no way the outcome of mere toil. Toil destroys more artistic sentiment than it ever creates. It has its virtues. It contrives, undoubtedly, to make bad work good work, but, inversely, does it make good work poor work; destroying the dash, the piquancy, and the brilliancy of genius, just as a studied sentence destroys the effervescent charm of brilliant impromptu. Toil, therefore, outside the toil of study, has not aided Onslow Ford in the production of his finest work, and those who remember his "Folly" of 1886, or even his Irving as Hamlet in 1883, need not to have waited for his Shelley Memorial or his superb Gordon Statue at Chatham to have proclaimed him a Sculptor of the very highest class. Poor Shelley, lying on the sea-shore near St. Arengo, just as they found him on that ill-fated July day now nearly three-quarters of a century ago. The design is magnificent. The body stretched upon a slab, as if just cast up by the waves. One arm lies loosely across the breast, and the head hangs slightly backwards. Never has bronze been cast to such a poem; and the monument marks the spot where the poet sleeps—in Keats's tomb.

Perhaps the finest statue Onslow Ford has yet completed is Lord Strathnairn's, recently erected at the top of Sloane Street, one of the most unsuitable positions in London. The commission came from the City, as many of Mr. Ford's best commissions do, for the veteran Field-Marshal was always a prime favourite with the City magnates, and it was in the Egyptian Hall of the Mansion House that the necessity of duly honouring the hero's memory was first discussed. Over this work Mr. Ford fought a desperate fight. He strongly advocated the uniform of a Colonel of the "Blues," instead of the very inartistic garb of a Field-Marshal. But the military forces were too strong for him, otherwise his original study for the work bade fair to develop possibly into the finest modern equestrian statue in this country. But beyond mere portraiture which at one time it was feared Onslow Ford would prize most, there have been, during the past six or seven years, some fine things creeping out of the studio in Acacia Road, things which if they have not all the subtlety of Mr. Thornycroft's works are free from the impurity of Boehm and men of the semi-heroic School. The foreign influence is not sufficiently apparent to add a zest to his conceptions, and as he is yet well on the fair side of fifty Onslow Ford has a mighty career in front of him if he will forget the laurels already on his brow.

THE death is announced from Newport, Rhode Island, of Mr. Richard Morris Hunt, the well-known Architect. He was 66 years of age.

LARGE Ironworks and Engineering Shops are being established by an Anglo-Russian Company in the Caucasus. The Company will employ 3,000 workpeople in the manufacture of railway carriages and locomotives.

IN NELSON'S COUNTRY.

A MEMORIAL RESTORATION TO THE HERO OF TRAFALGAR.

HOW few are acquainted with the village in which England's naval hero, Nelson, was born. Burnham Thorpe, the little sequestered Norfolk hamlet, far up in the north of the county, is too far out of the beaten track to tempt the tourist. The village life goes on as in the days of Nelson, and but for its association with the name of the great Admiral, the obscurity of the past would be continued to the future. To those who have visited Burnham, astonishment has always found expression from the fact that not a stone or a monument stood in his birthplace to perpetuate the memory of one of the most favourite of British heroes, and whose connection with the village was of the most intimate kind. Nelson's father, the Rev. Edmund Nelson, M.A., was rector of the parish (A.D. 1755 to 1802). Horatio, his fourth son, was born at the Rectory on Michaelmas Day, 1758. His childhood was passed in Burnham Thorpe. The parish register contains the boy's signature more than once as a witness at marriages in 1769, when he was about 11 years of age. His father and mother sleep in the Chancel of the parish Church. The old Rectory occupied by Nelson's father has long disappeared, a more modern structure having been erected in another part of the grounds; but the old pump, which served the household of the Nelsons, still remains. The rippling wayside stream in which the future Admiral ducked the country boy, and was in turn ducked, still runs as merrily as ever, and the room in the Lord Nelson Inn, where Nelson supped for the last time with his fellow villagers prior to his departure to meet England's foes, is still the same. In 1770 Horatio Nelson went to sea, and it is striking to note with what constant affection he always speaks of his Norfolk home. When afloat he sent gifts for the relief of its distress, when ashore he first hastened to Burnham Thorpe. Here he spent the five years (November 1787—January 1793) during which he was unemployed. In 1798, when raised to the Peerage, he was created Baron Nelson of the Nile and of Burnham Thorpe, and in 1801, Viscount Nelson of the Nile and of Burnham Thorpe. On May 11th, 1804, he writes touchingly: "Most probably I shall never see dear, dear Burnham again, but I have satisfaction in thinking that my bones will probably be laid with my father's in the village which gave me birth. The thought of former days brings all my mother into my heart, which shows itself in my eyes." His affection for his native village was never stronger than when Nelson was nearing the close of his glorious career. At Trafalgar, when the *Victory* was going into action, Lord Nelson said: "This is the happiest day of my life, and it is the happiest day, too, for Burnham Thorpe, for it is the day of their fair." Burnham Thorpe was the revered spot which rose up before his fading memory. When Nelson was dying in the cockpit of his flagship the *Victory*, he said to Captain Hardy, "Don't throw me overboard, I wish to be buried by the side of my father and mother at Burnham Thorpe, unless it please the King to order otherwise." These words show how his love to the village and to his father's Church lasted to the very end. It did please the King to "order otherwise," and our hero lies in St. Paul's Cathedral.

In the village, therefore, so closely allied with Nelson's heart, it was only meet that some memorial should be raised to ever perpetuate his name. An influential Committee was therefore formed for the purpose, and at the first meeting held at Marlborough House in June 1890, the Prince of Wales presiding, it was resolved that the memorial should take the form of restoring the Parish Church, which was at that time described as being in a deplorable state. The most expensive section of the work has been finished. The South Aisle and Tower have been rebuilt, the Arch at the west end, which was formerly blocked up and an unsightly Gallery, has been opened. The outlay represents £4,000. Another £2,000 is required to complete the work. Most appropriately, the date chosen for the re-opening of the sacred building was Thursday, August 1st, the date of Nelson's victory.

THE VERDIN TECHNICAL SCHOOLS AND GYMNASIUM.

OPENING NEXT THURSDAY.

THE Verdin Technical Schools and Gymnasium, which will be opened at Winsford by the Duke and Duchess of Westminster next Thursday, are the gift of Mr. Joseph Verdin, whose brother, Mr. W. H. Verdin, laid the foundation stone exactly a year ago. The Schools comprise Class and Preparation Rooms, a Chemical Laboratory, an Art Store Room, Plumbing Room, Cookery Room, Laundry, Drying, and Ironing Rooms, and Committee and Cloak Rooms. The lighting and ventilation as well as the heating of the building are devised on the most recent principles. Messrs. Woodhouse and Willoughby, of Manchester, the Architects, have produced a building which, though on a much larger scale than its neighbours, is in keeping with the character and Architectural traditions of the locality. In the centre of the block is the Main Entrance, surmounted by a large Flemish scroll gable, and flanked on either side by subordinate gables, each with a bold chimney-stack springing from the apex, and connected by the ridge of the roofing with the main gable. Two subordinate doorways, similar in character and treatment to the principal entrance, provide direct communication—one with the Boys' Section of the Schools and the other with the Girls' Department—while the Front Entrance leads directly through an ante-room to the Gymnasium. Mullioned and transomed windows light the three principal elevations. The front of the building and part of the sides are faced with Ruabon red stock bricks, and all the dressings are in red terra-cotta. The joiner's work is generally of St. John's pine, stained a walnut shade and twice varnished. The Gymnasium measures 49 ft. 6 in. by 37 ft. 6 in., and is 30 ft. high from floor to ceiling. The cost of the building, including the furnishing, amounts to about £8,000.

THE LARGEST GRAVING DOCK IN THE WORLD.

THE magnificent Graving Dock which the London and South-Western Railway Company has just completed as an essential part of their improved Dock and Harbour Estate at Southampton, was opened on Saturday by the Prince of Wales. Up to the present time the ship-repairing requirements of Southampton have been met by a series of four graving docks, varying in length from 250 feet to 450 feet, and in width from 51 feet to 80 feet, with a depth of water over the blocks ranging from 15 feet to 25 feet. The great increase witnessed in the dimensions of passenger and trading steamships within the last quarter of a century has necessitated a corresponding expansion of the facilities provided at the principal ports for dry docking, and in this movement the London and South-Western Railway Company, as the owners of the extensive range of docks at Southampton, have far out-distanced all their competitors. They have, indeed, constructed the largest single graving dock in the World, its actual dimensions being—length, 750 feet; width at sill level 87½ ft.; and at the quay level, 112 ft. 6 in. The water capacity is 73,000 tons, and the maximum depth 35 ft., so that in every detail the dock is fitted to receive much larger vessels than any which even modern trade has demanded. Built due north and south on reclaimed land lying between the rivers Itchen and Test, the dock opens direct into the Empress Dock, the large deep-water area opened by the Queen in July, 1890, and the situation chosen will enable the largest American, Cape, or other vessels using Southampton, to be docked without the slightest interruption of the growing volume of trade centred in the port. It is claimed that the engines employed to empty the dock are probably the most powerful ever introduced. The plant, which has been erected by Messrs. John and Henry Gwynne, of Cannon Street and Hammersmith, consists of a pair of Invincible centrifugal pumps, each driven direct by a pair of vertical high-pressure steam engines. A third Invincible centrifugal pumping engine of smaller dimensions, also driven direct by a high-pressure engine, is supplied to deal with the leakage, and to drain the culverts.

VILLAGE CHURCH COMPETITION

THE ASSESSOR'S AWARD.

THIRTY-FOUR sets of drawings were submitted in this competition, from which we selected seven, which were sent to Mr. Arthur C. Blomfield, M.A., whose report is appended, the names of the authors of the premiated designs being as follows:—

- 1.—"Æsthos," CHAS. H. HOLDEN,
156, Bradford Street, Bolton.
- 2.—"La Signora dalle Camelie,"
HERBERT F. J. COOPER,
63, Vassall Road, North Brixton, S.W.
- 3.—"Couvre-feu," FRANK WHALLEY,
36, Sella Street, Chester.

6, Montague Place,
Montague Square, W.

DEAR SIR,—After a careful examination of the seven sets of drawings selected from the thirty-four sent in, I have had to set aside two bearing the titles "Jack" and "Ave Maria," partly on account of non-compliance with the rules laid down for the competition, and partly for obvious defects either in plan or general arrangement.

Having carefully compared the remaining five, I have selected that sent in under the title of "Æsthos" as complying most nearly with the requirements of a small Church for a village community.

The order of merit runs thus:—(1) "Æsthos," (2) "La Signora dalle Camelie," (3) "Couvre-feu," (4) "Euric," (5) "A Sketch of a Mouse," (6) "Ave Maria," (7) "Jack."

I must add that not one of those designs could be carried out for the specified sum, though, perhaps, that which I have placed first comes nearer the mark than the others.

I do not propose to make any report on the last two in the list for the reasons given above.

"Mouse."—The design bearing the sketch of a mouse is an admirably drawn and carefully finished set of drawings, and if intended for a small School or College Chapel would have many points to recommend it, but for a Village Church it is quite unsuitable, both in plan and general character of design; nor could it possibly be built for anything like the stipulated amount. The arrangement of the Chancel, which is uncomfortably narrow, and disproportionately long, is bad—no room being left for communicants—nor is there any Altar-rail. There is no indication of how the Choir, which in a Village Church is almost invariably composed of men and boys, is to be divided, and a considerable amount of valuable space is wasted in other ways, and the Pulpit and Clergy Seat are obstructive. The stairs to the West Gallery are much too narrow; the Font is boxed in so as to be almost useless, and a Ladies' Lavatory is unnecessary and wasteful.

"Euric."—The design marked "Euric" is capitally drawn and carefully worked up, and would have been placed much higher but for one radical defect, which mars the whole design—viz., an almost total absence of light. The side windows are mere lancets and the West Window is so overshadowed by the external arch, 9 ft. beyond, as to be of very little use. The East Window affords little, if any help to the Nave. The design is, however, a clever one, and, apart from the fact that a great deal of space is wasted and a large quantity of material extravagantly used to produce the rather Swiss effect of the Bell Tower and its abutments, the effect would be in execution, no doubt, pleasing and picturesque.

"Couvre-feu."—The set of drawings bearing these words, while displaying no great originality of conception, fulfils fairly well, in its simplicity of style and general arrangement, the requirements of an inexpensive Village Church. The Font is in an impossible position, however, and the space between the Choir Seats is too narrow. The Turret stairs to Belfry cut too much into the Tower Pier, and advantage has not been taken of the slope of the ground for the Heating Chamber. The necessity of the buttress under the West Window is not apparent.

"La Signora dalle Camelie."—This drawing is perhaps the most striking and original of all, and possesses great merits in many ways. The external appearance, however, is not that of a Church, but rather that of a picturesque farm building, the only indication of its purpose

being a crucified figure of Our Lord high up on the North Gable. The design is undoubtedly clever and original, but its failure to suggest the purpose or object of the building considerably discounts the merits of the plan and general arrangement, which are, in their way,

any special originality of style, is characterised by a due sense of proportion, honesty of purpose, and in point of general arrangement and simplicity of plan is the best of the seven designs I have examined, and the appearance both externally and internally would be such



WEST ELEVATION



SOUTH ELEVATION

Scale. 0 10 20 30 40 50 feet

DESIGN FOR A VILLAGE
CHURCH BY "ÆSTHOS"

very good. The arrangement of chairs, there being only an entrance on one side of the Church and a small door at the West end, is inconvenient. The way up for communicants is narrow, even though there is a return passage; and the Font is not well placed—a view of the Sanctuary should be obtainable from it during the Baptismal Service. The cost would far exceed the limit imposed.

"Æsthos."—This design is, in my opinion, the best. It more nearly complies with the requirements of the competition, being essentially a Church in appearance and plan for a small village community, and being able to be built for something like the sum named, or at any rate something nearer than the other designs.

There are one or two criticisms, however, which may fairly be passed.

The Roof construction is not good, but could easily be amended.

The abutment to the west of the North and South Tower arches should be increased.

The Font would be better under the West Window.

The whole design, while not conspicuous for

as to impart to the building a quiet and dignified character.—I am, dear Sir, faithfully yours,

ARTHUR C. BLOMFIELD.

Of the drawings we did not deem it necessary to submit to the Assessor:

"Trafalgar" sends a design, simple in plan, as a Village Church should be, and detailed very neatly. A little more dignity in the elevations would have prompted "Trafalgar's" work being submitted to Mr. Blomfield.

"Carlos" shews the elements of design in his set, but his section is quite illogical in construction.

"Anglo Saxon" is likely to become a good draughtsman, and a little more careful study will produce better work.

"X.P.'s" drawings have some merit in them.

"Classic" sends a set of plans, the Tower of which is distinctly good, but totally out of character in a Village Church of 200 seating capacity.

"Scotia" sends an ambitious design labelled Greek Architecture, but which has much Asiatic feeling about it. Anything more incongruous than a Greek Temple on the hillside of an

English Village we cannot conceive; but the details prompt us to advise "Scotia" to persevere in the style he has chosen, and if, in after years, he is able to purify much of the style that passes as modern Grecian he will not have done badly.

"Oak Shingle," who has elaborately mounted his two sheets of drawing on boards a quarter of an inch in thickness, has the pen of a ready draughtsman, the section of the Church Spire being executed with perfect accuracy of detail, but his elevations and sections show a woeful disregard of the mere rudimentary rules of Design. "Oak Shingle" should at once take rod and tape and do nothing but measure up old work and transfer his measurements to paper, for twelve months, and then "enquire again."

The designs submitted by "Mars," "Dickey Sam," "Faith," "Endeavourer," "Alpha," "Horseforde," "Lux," "Sambo," "Victor," "An Attempt," "Westward Ho," "Go Bang," "Deo Dante Dedi," "Mayor" (who is evidently playing off some practical joke upon us), "Novice," "Caibre Cincait," "Quill," "Hil-yard," "Apis," "Ted," and "X.P." call for no special mention. Some possess the germ of Architectural thought, but several of them are calculated to break the heart of their authors, pastors, and masters, who have permitted them to enter the ranks of Architectural practice, with the prospect of ever making bread and cheese. Perseverance, however, is the watchword every student should figure on his drawing board, and perseverance let it be.

THE stonework of the Great Hall at Hampton Court, which had become somewhat dilapidated in parts, is being repaired.

THE South London Fine Art Gallery was re-opened on Sunday, and will be open every day (except Saturday) till next June. The hours are three to five, and seven to half-past nine. The Gallery is meant especially for the poor and for children, and to enable them to use the pictures and books with profit, special arrangements are made for the young people.

Two new playgrounds for Londoners were opened to the public last week by the County Council. Spa Green, in Rosebery Avenue, and Island Gardens, in the Isle of Dogs. No district in London was more in need of a recreation ground than the dismal region of the Isle of Dogs. A house which the Council acquired along with the gardens is to be utilised as a Free Library.

THE Secretary of State for Foreign Affairs has received a copy of a notice issued by the Bulgarian Ministry for Public Works inviting tenders for the construction of the Roman-Pleven-Choumen Railway. The tenders must be sent in before November 1st next. The notice and the conditions of tender can be seen at the Commercial Department of the Foreign Office, S.W., between 11 and 6.

WITH reference to the revised scheme for the construction of a Bridge across the English Channel, in which Sir John Jackson, the deep sea works contractor, is now interesting himself, we learn that as a part of the preliminary work it is proposed to erect two experimental piers (such as the Bridge would be carried upon) a mile or two from the shore, opposite the South Foreland, from which point the shortest route could be obtained across the Channel.

A NEW *Creche* for the poorer (Blowick) end of All Saints' parish, Southport, was opened recently. The building is of two storeys, and has cost about £1,100, which has been most generously provided by Mrs. Blanchard, leaving the furnishing and the erection of boundary walls to be met by local subscriptions. This *Creche* displaces the old building close by, which has been in regular use since August, 1882, and is the first in the diocese to be designed and erected specially for such a purpose.

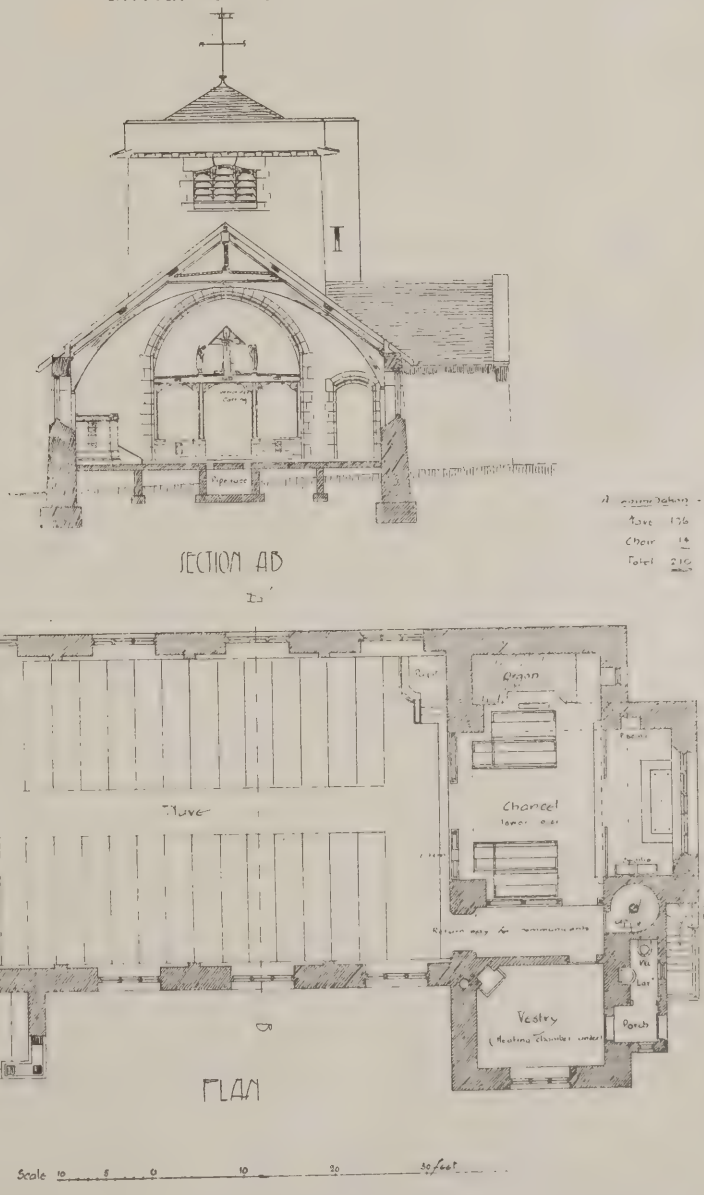
At a recent meeting of the Wimbledon Urban District Council it was decided to discontinue the existing system of street illumination by means of petroleum, and to illuminate the whole town by electricity. The initial outlay for installation is estimated at £31,000, and the yearly cost of maintenance at £3,750. The scheme provides for the erection of arc lights in the main thoroughfares, and 1,000 incandescent lamps of thirty-two candle-power each in the remaining streets.

THE HEAVIEST CROWN IN EUROPE.

MANY have seen the Queen's Crown in the Tower, but few know how it is made and how many jewels it contains. It is constructed of jewels taken from old Crowns, and other stones provided by Her Majesty. It consists of emeralds, rubies, sapphires, pearls and diamonds. The stones, which are set in gold and silver, incase a crimson velvet cap with a border of ermine, the whole of the interior being lined with the finest white silk. Above the crimson border on the lower edge of the band is a row of 129 pearls. Round the upper part of the band is a border of 112 pearls. In the front, stationed between the two borders of pearls, is a huge sapphire, purchased by George IV., set in the centre of valuable pearls. At the back, in the same position, is another but smaller sapphire. The sides are adorned with three sapphires, and between these are eight emeralds. Above and below the sapphires, extending all round the crown are, placed at intervals, fourteen large diamonds, the eight emeralds being encircled by clusters of diamonds, 128 in number. Between the emeralds and sapphires are sixteen ornaments, each consisting of eight diamonds. Above a circular bend are eight sapphires, set separately, encircled by eight

which adorned the helmet of Henry V. at the battle of Agincourt. The centre of the ruby is hollowed out, and the space filled, in accordance with the Eastern custom, with a smaller ruby. The Maltese cross is formed of seventy-five splendid diamonds. At each of the sides and at the back is a Maltese cross with emerald centres, containing respectively 132, 124, and 130 sparkling diamonds. Level with the four Maltese Crosses, and stationed between them are four ornaments shaped like the fleur-de-lis, with four rubies in the centre, and surrounded by diamonds, containing eighty-five eighty-six, and eighty-seven diamonds. From the Maltese crosses spring four imperial arches, composed of oak leaves and diamonds. The leaves are formed of 728 diamonds; thirty-two pearls represent the acorns and fifty-four diamonds the cups. From the upper part of the imperial arches hang suspended four large pendant-shaped pearls set in diamond cups, each cup being formed of twelve diamonds, the stems from each of the four hanging pearls being incrustated with twenty-four diamonds. Above the arch is the mount, which is made of 438 diamonds. The zone and arc are represented by thirty-three diamonds. On the summit of the throne is a cross, which has for its centre a rose-cut sapphire set in the centre

DESIGN FOR A VILLAGE CHURCH BY "ÆTHOS"



diamonds. Between each of these eight sapphires are eight festoons of eighteen diamonds each. In front of the crown is a diamond Maltese cross, in the centre of which glitters the famous ruby given to Edward I. by Don Pedro the Cruel. This is the stone of fourteen large diamonds. Altogether the crown comprises one large ruby, one large sapphire, twenty-six smaller sapphires, eleven emeralds, four rubies, 1,363 brilliants, 1,273 rose diamonds, four pendant-shaped pearls, and 273 smaller pearls.

THE "WREN" OF ANCIENT EGYPT.

SENMUT, THE ARCHITECT, AND HIS QUEEN.

RIGHT opposite to the stupendous ruins of the Temple of Amon, at Karnak, with the River Nile between them, stands, most curiously situated, the recently-discovered Temple of Dér-el-Bahri. At this point the great gaunt limestone cliffs of the old river bank fold back into the Western Desert, and form an almost right-angled crease. At the base of the scar, and dove-tailed into a corner of the rock, the Architect has planted the Temple. At the upper or Sanctuary end, and along the right side, the protecting cliff rises sheer from the platform and embraces the walls of the building; and also, be it said, has proved a source of enormous trouble to the explorers from the deposit which the weathering of centuries has rolled down from its sides upon the Temple platform.

Now, if we imagine that the platforms and the buildings which the explorers have exposed form the Temple proper, we shall be quite in error, and herein lies the feature which stamps this building as unique amongst the sacred edifices of the land. The Temples of Egypt were either great independent erections, standing freely upon the plains, or gigantic caverns hewn into the cliff side. The Temple of Dér-el-Bahri is a combination of both. The great platforms, no less than three in number, rising like three gigantic steps one higher than the other, are merely the approach to the Temple. The holy of holies, the sanctuary of Amon, to which great God of Thebes the building is dedicated, lies in the cliff side, and for no less than 60 feet the visitor penetrates the solid rock to examine its features. And besides this Temple there are many minor rock-hewn Halls and Shrines, to which he will find entrance from the platforms. The building is, in truth, a Transition one. The Architect has taken his idea of the sanctuary from the tombs in the hill side, especially those at Beni-Hassan, and suggestions for the platforms from the Temples of his predecessors, combining them with consummate skill and taste. It forms, in style and in time, a link between the pile at Karnak and the gigantic rock-cut Temple of Aboe-Simbel, which Rameses II., 200 years later, carried for 300 feet into the cliff side.

High up in the face of the precipice the Architect of Dér-el-Bahri has hewn his Temple and Shrines, and the height at which he has placed them has suggested to him the conception of bringing the worshipper up from the level of the plain beneath by a succession of platforms, the first two of which are some 250 feet long and 300 feet wide. The "step" from platform to platform was too lofty to scale directly, and so the approach of the worshipper was facilitated by sloping ways, springing from the centre of each platform to the level of the one above it. The faces of these steps have been utilised for inscriptions and historic pictures, and, as we shall presently see, one of their surfaces records, with full illustrations, an incident of the time which has for us just now some points of special interest.

To whom do we owe this lovely Temple? Who was its Architect? When was it built? The excavations of the last three winters have given complete and satisfactory answers to the questions. Its erection was due to the munificence of Queen Hatasu, or, as she is otherwise called, Queen Ramaka, wife to Thothmes II., and aunt to Thothmes III., one of whose obelisks is a familiar object on the Thames Embankment. We are all now familiar with the idiosyncrasy of this great Queen. The pictures in her Temple invariably represent her dressed as a man, while the inscriptions speak loud in praise of her as a woman. After all, she did no worse than Joan of Arc, and thus anticipated by some 3,500 years the aspirations of the rational dressers and lady bicyclists of our own day.

And the Architect? Who was this Ecclesiastical Artist—this Wren of ancient Egypt? We now know much about him. A statue of him is in Berlin, and his name was Senmut. Thus he speaks of himself in the inscription on the statue in words which curiously illustrate the trouble taken by the officials to combine the actual and assumed sex of their kingly queen:—"I was a great man who loved his

lord, and I gained the favour of my queen. He exalted me before the face of the land to the rank of overseer of his house and purveyor of the land. I was chief over the chiefs, head of the Architects, I executed his orders in the land. I lived under the lady of the land, Queen Ramaka, living eternally." And thus some 1,500 years before Christ, and 200 years before the Hebrews fled from the land, Queen Hatasu and her Architect, Senmut, planned and built this lovely Temple. One word about the famous Sculptures on the face of the step to the upper platform. A considerable portion of this wall surface of almost 300 feet is occupied with pictorial representations of a commercial expedition despatched by the Queen to a land spoken of as Punt. Five ships comprised the expedition, and they returned laden with products, such as gold, ivory, and incense; with animals, such as leopards, panthers, dogs, monkeys, and giraffes; and with aromatic trees, which we see at first in flower pots, and, after their transplanting, flourishing in the soil of Egypt—commodities which point undoubtedly to an African locality; and, indeed, there is excellent ground for supposing that Punt was no other than the coast of Africa, at the lower end of the Red Sea, and now known as the Somali country. It is more than imagination that would see in that extraordinary Somali encampment now in the grounds of the Crystal Palace the direct descendants of those men of Punt, with whom the sailors of Queen Hatasu traded 3,500 years ago? It is an idea worth considering as we run down to the Palace after a visit to the Dér-el-Bahri relics at Burlington House.

ABOUT two miles from Ecclefechan, in Dumfriesshire, is the Roman Fort of Birrens, known to the Romans as Blatum Bulgium. It has long been known as the probable site of a Roman Fort; now its examination by spade and pick has been undertaken by the Society of Antiquaries of Scotland, and in particular by Dr. James Macdonald and Dr. Christison, two well-known Scotch antiquaries. The excavations are still incomplete; but the results hitherto attained are said to be most promising, including the foundations of some well-built edifices, potteries, and a few coins.

ARRANGEMENTS are now nearly completed for the carrying out of the new building scheme which the Committee of the Newcastle Y.M.C.A. has had under consideration for some time. Active operations will be commenced shortly, probably early in the autumn. The new building will cover the whole of the ground occupied by the present premises of the Association, and extend right back to the Auction Rooms of Messrs. Davison and Son. About £10,000 will have to be raised to enable the Committee to carry out the scheme.

THE Pendlebury Institute Company, Limited, has agreed to sell the whole of its property to the Swinton and Pendlebury Urban District Council, to be used as a Town Hall and Offices. Owing to the vastly increased facilities for entertainments and the near access to Manchester, the original purposes of the Institute no longer exist. School attendance Offices and Overseers' Offices have already been opened at the Institute, but it is not proposed to remove the District Council Offices there at present.

THE Secretary of State for Foreign Affairs has received a copy and translation of a notice issued by the Municipality of Vienna, calling for tenders for plans, construction, and working of a network of electric railways in and round that city. The tenders must be sent in before the 14th of November next. The notice may be seen at the Commercial Department of the Foreign Office, S.W., between the hours of 11 and 6.

RECENTLY a treble bell, the small bell of a future peal when the Tower is built of St. John Baptist, Felixstowe, was temporarily hung at the west end of the Church, and was rung for the first time. The bell, which weighs over four cwt., was cast by Messrs. John Taylor and Co., of Loughborough, and is of fine tone.

A RAFT containing over 7,000,000 feet of lumber, mostly white pine, is on its way down the Mississippi to St. Louis. It is believed to be the biggest raft ever floated down the river. Carried by rail the lumber would make four and a half miles of car loads.

MASTER BUILDERS MEET AT LEEDS.

THE NEW FORM OF CONTRACT AND THE R.I.B.A.

THE National Association of Master Builders of Great Britain held its half-yearly meeting in the Arbitration Room, Royal Exchange, Leeds, on July 23rd, when representatives were present from London, Liverpool, Manchester, Birmingham, Bradford, Huddersfield, Bolton, Derby, Preston, Leicester, Walsall, Hanley, Newcastle-on-Tyne, Bristol, Hull, Leeds, Southport, Nottingham and Blackburn. The report for the past half-year was approved and adopted, and ordered to be printed, and circulated amongst the members. Mr. C. W. Green, Liverpool, the honorary treasurer, submitted his audited accounts for the past half-year, showing the Association to be in a very satisfactory financial position. The President, Ald. J. Bowen, J.P., of Birmingham, explained to the meeting the course which had been adopted in reference to the Plumbers' Registration Bill, introduced into Parliament last session, and impressed upon the members the desirability of strongly opposing the Bill should it be again introduced. A letter was read from Mr. Stanley G. Bird, London, giving an account of the result of negotiations, which had extended over a long period, with the Royal Institute of British Architects, with reference to the proposed new form of contract, and expressed much regret that, owing to the course adopted by the Royal Institute of British Architects in refusing to sanction the introduction of an arbitration clause in the form of contract, the whole matter had practically fallen through. Mr. John Dawson, of Huddersfield, in expressing his view as regards the Employers' Liability Bill, strongly urged the members to insure themselves against the risk of accidents to their workmen. Mr. T. F. Rider, London, gave a short account of the cause of the action which had been instituted by the Master Plasterers' Association of London against the National Association of Operative Plasterers, which had, for some considerable time past, systematically persecuted and endeavoured to get boycotted certain master plasterers in London with whom they may have had some slight grievance. Mr. Rider explained that this case was one in which master builders generally were concerned, and they should make a point of giving all the support they could in order to strengthen the action taken by the above body. It was decided that the Association should render all the support it could, both financially and otherwise, to the Master Plasterers' Association of London. Various other matters interesting to the building trade were discussed, amongst which reference was made to the apprentices' indenture form, some being drawn up in such a manner as to render the employer liable to maintain the apprentices when unable to work through illness. Mr. W. Irwin, of Leeds, was unanimously elected a member of the Council to fill the vacancy occasioned by the resignation of Mr. Banks Mawson. It was resolved to hold the next half-yearly meeting in London. In the evening the members were entertained by the Leeds Master Builders Association at dinner in the Queen's Hotel, when Mr. W. Irwin, the vice-president of that Association, expressed the pleasure it afforded the Leeds Master Builders to have the opportunity of receiving the representatives of such an important industry, and commented upon various matters relating to the building trade. Alderman John Bowen, in thanking the Leeds Master Builders for the reception accorded to the National Association, commented generally upon the objects for which the Association was formed, and called the attention of the members to the fact that defence and not aggression was one of the principal objects in view, and strongly urged all master builders to stand shoulder to shoulder, and be united in action, as it is only by this means the combinations of the operatives can be easily and effectually dealt with.

An interesting archaeological discovery was recently made in Jamaica of a cave containing twenty-four skeletons of the aboriginal Arawaks, a shattered canoe of cedar wood, an arborvitæ mortar, and two curious earthenware vessels.

MAKING ELECTRICITY.

NIAGARA, UNLIMITED, 450,000 HORSE-POWER.

THE utilization of Niagara on the American side is effected, as on the Canadian, by turbine wheels. About a mile and a half above the American Fall a broad and deep Canal has been cut to carry the rushing water from the rapids to a series of wheel-pits, down which the water drops into the turbines. Subterranean Tunnels carry off the water when it escapes from the revolving turbines, and ultimately it is discharged into the river again through holes in the face of the cliff that one may see from the new Suspension Bridge. This scheme is to supply 100,000 horse-power of motive force; and it is so far in operation that two or three days ago a current of 4,000 horse-power was "laid on" to an aluminium factory a mile away. A second group of works, to supply another 100,000 horse-power, on the same plan, is to be constructed when the first group is completed. Meanwhile the Canadians are not idle. Their scheme is to have a huge Subterranean Chamber beneath the bed of the river in rear of the Horseshoe Fall, or rather of the end of it, near which stood in former times a great rock. In this Chamber the turbines and dynamos will be placed, all out of sight, and certainly out of hearing. This great plant will be drawing from the waters of Niagara 250,000 horse-power of motive force without the spectator before the curtain being any the wiser. Thus between them the Canadian and United States turbines will generate electric energy equal to 450,000 horse-power, to be transmitted by wires to the many cities around them, to a distance perhaps of over a hundred miles. In Canada, which possesses the finest, the largest and the most famous of the Falls, and which was the first to turn the water-power into electricity, this kind of motive force will some day be the dominant factor. Mighty rivers and lakes are the grand characteristic of Canada; great waterfalls are as common there as hills in England. In some places, as at Ottawa, the power dormant in these Falls has been turned to account, but the quantity of power allowed to run untapped is so vast that what is used is nothing in comparison. The English public has no conception of what can be done with the turbine nowadays. The way we use what little water-power we do use is by the overshot or undershot-wheel, made familiar to us by artists' sketches of places now out of the way and in ruins. Of such, in a more businesslike style, is the large wheel at Laxey, in the Isle of Man. But when you have a mass of water, even with a small fall—6 ft. or 8 ft.—the Canadian form of turbine seems to work wonders. The water is conducted into a channel, gathering force as it slides; and apparently by sheer weight in the Turbine Chamber it sets in motion mighty wheels that by the act of revolving produce the potent current of electricity—a current which at Ottawa (although produced from a very small portion of the Falls of the Ottawa River) suffices to run all the tramcars for many miles around and through the city, to light the streets and the buildings, to work the "elevators," and to supply the motor power of various factories. When we reflect upon the quantity of water annually poured over England by our too-liberal clouds and the quantity that meanders its way to the sea in so many directions, it would certainly seem well worth while that those bodies charged with educating our young engineers should institute travelling scholarships, and send some of them off to study the applications of water and electric power in Canada and the United States. It is an astounding thing that, when hundreds of cities, and even mere villages, in North America have their cheap, convenient, swift, and universally patronised electric trams, we in England should be only just thinking about them.

MR. CHARLES HOPKINSON, the head of the Bee Hive Engineering Works, Retford, died suddenly last Sunday week. As a practical milling engineer he was known all over the United Kingdom and also on the continent, and he was the owner of many patent rights, and had taken several gold and other medals at the Royal Shows and Milling Exhibitions all over the country.

A BIG WORK AT NEWCASTLE.

EXTENDING THE ASYLUM.

THE extension of the Newcastle City Lunatic Asylum at Gosforth, the foundation stone of which was laid by the Mayor (Ald. W. H. Stephenson), on Wednesday last, will involve an expenditure of £100,000. The City Lunatic Asylum at Coxlodge is about thirty years old, and has cost something like £96,000. A site was chosen at Coxlodge, consisting of 52½ acres, for which the price paid was £10,000. The Visiting Committee appointed as its Architect Mr. Moffat, of Edinburgh. Further extension becoming necessary, and having been agreed upon, the Council invited Architects to send in plans in competition. No fewer than twenty-two Architects competed, and the judging of the plans resulted as follows:—First, Mr. J. W. Dyson, Grainger Street, Newcastle; second, Messrs. Montgomery and Carr, Newcastle; third, Mr. W. L. Newcombe, Newcastle; fourth, Messrs. Freeman and Robbins, Newcastle. Mr. Dyson was appointed Architect for the buildings, and premiums were awarded to the remaining three Architects. The contract was given to Mr. Walter Scott, Newcastle.

The new Asylum is being erected for male patients, and will accommodate 361, and when completed the whole of the present Asylum will be adapted for women patients, the total accommodation being then about 800. The new buildings are arranged in two-storeyed blocks, the various floors forming wards for the different classes of patients. The walls externally will be of stone, and the roofs covered with best Bangor slates. The patients' blocks will have the floor between ground and first floor of Mark Fawcett and Co.'s system of fireproof flooring, and the ceiling to the upper floors will be formed of concrete. The floors and woodwork generally will be pitch pine. The Lavatories, Bathrooms, &c., will be lined with glazed bricks. All the Staircases will be of Yorkshire stone. The heating and ventilation will be the system known as the "plenum" system, and all apparatus is to be in the subways below the buildings, so that no part can be interfered with by patients. There will be fire main services both inside and outside the buildings. In addition to the patients' blocks there is a complete Administrative Department, comprising Committee Rooms, Offices, Kitchens, Stores, Dining Hall, Workshops, Bakery, Visitors' Room, Club Rooms for attendants, and apartments for the medical and other officers. There is also a new Laundry, Isolation Hospital, Recreation Hall, Chapel, Superintendent's Residence, Head Attendant's House, ten Cottages for attendants, and Entrance Lodge. The buildings will be lighted by electric light, and the motive power required for driving machinery, ventilating fans, &c., will be electric. A complete electric plant is to be provided. The foundations, and the erection of the main buildings to the ground floor line have been carried out by Mr. John Ferguson, of Newcastle, and the contract for the superstructure and auxiliary buildings has been let to Mr. Walter Scott, of Newcastle, who is now proceeding with the work. The heating and ventilation will be carried out by Messrs. Ashwell and Nesbit, of Newcastle and London; the electric light fittings, wires, and cables by the Corlett Electrical Engineering Co.; and the sanitary fittings throughout are to be of Doulton's manufacture. The whole of the proposed works have been designed by Mr. John W. Dyson, Architect, of Newcastle. To give an idea of the magnitude of the buildings, it may be stated that they will cover five acres of ground, and there will be over 3½ million cubic feet of actual buildings.

THE Duchesse d'Uzès' Statue of Joan of Arc has been unveiled at Pont-à-Mousson. It was refused admission at the last Paris Salon—according to some, because it was not believed to be really her own work, and, according to others, because the professionals were jealous of an amateur.

A FRENCH engineer has conceived the interesting idea of reproducing the house in which Napoleon lived at St. Helena, as an attraction during the Exhibition of 1900. The house will be an exact copy of the original, surrounded by panoramic canvases representing the natural environs.

A FIRE RESISTING TREE.

AN interesting account of a fire-resisting tree is given by Mr. Robert Thomson in a Consular report on Colombia. He writes: "The thousands of square miles of natural pasturage on the plains and lower hills of Tolima assume during the rainy season the most beautiful verdure. But in the alternate season of drought the general aspect is that of a desert. These lands were originally acquired at a nominal cost. No conservation of the natural fertility of the land has ever been taken into consideration. On the contrary, the natural grasses, intermixed with scrub or brushwood, have been systematically burned from year to year, and the burnings effected during the most scorching period of drought. The principal object attained by this process of despoliation is the reproduction of new and tender herbage or pasturage, which, with the advent of the rainy season, forthwith covers the parched surface. Vast pastoral regions—scores of thousands of square miles—in tropical America are thus maintained. Half a century, or it may be a century, of this treatment suffices to extinguish almost every trace of fertility in the soil. In Tolima alone hardly less than 2,000 square miles of savannahs and hills, ascending to some 3,000 feet, have in this way been transformed into comparatively barren wastes. And in other parts of the Republic many thousands of square miles have similarly lapsed by this devastating process. This persistent burning of the savannahs and hills for crops of renewed pasturage plays desperate havoc with all other vegetation, trees and brushwood. Isolated palm trees, with their intensely hard trunks and endogenous structure, together with groups of brushwood in sheltered or humid spots, sometimes withstand the fury of the flames. There is, however, one phenomenal exception to this subversive power of the fires. A humble tree with contorted and rugged trunks and branches and scabrous leaves, a tree presenting the most subdued and weird aspect conceivable; this pigmy tree not only resists the fury of the flames, but fire is actually congenial and subservient to its existence, for the tree, instigated by the conflagrations, forms itself into great plantations. The name of this tree is chaparro (*Rhopala obovata*), indigenous to Colombia and other South American countries. It attains a height of 15 to 20 feet, and its distorted trunks measure from nine to 12 inches in diameter. It is widely distributed in Colombia, for I have found it at the Sierra Nevada of Santa Marta, and dispersed inland 1,000 miles from the sea. In contact with great forest fires it maintains a precarious existence. But, as already explained, it usurps dominion in places where no other tree can grow. In Tolima it abounds on the slopes and ridges of the hills at elevations from 1,000 to 3,500 feet. In this department alone hundreds of square miles of the lower hills, which have been reduced to sterility by incessant burnings, are occupied by this diminutive tree, and it assumes the aspect of vast systematically formed and well-kept plantations. This is more than a triumph of the "survival of the fittest."

By the will of Mr. George Woofenden, of Kenwood Bank, Sheffield, £120,000 is to be devoted to the erection and endowment of Convalescent Homes and Almshouses in Sheffield.

THE Parish of St. Luke, Chadderton, Oldham, is to be provided with a Vicarage. The estimated cost is £1,500. It is hoped shortly to proceed with the work of erection of the structure.

THE extension of the British Museum is likely, it seems, to be presently undertaken. The annual report of the Trustees announces that the purchase of 5½ acres of adjoining ground for this purpose is on the point of being completed.

THE Church at Easington, County Durham, which has been closed for nearly twelve months for the carrying out of improvements, was reopened recently by the Bishop of Durham. The total cost of the improvements is over £3,000.

POROUS glass is a late novelty in the Paris market. The holes are so small that neither dust nor draught follows its use, and yet the ventilation is said to be excellent.

Professional Items.

BALCOMBE.—Mr. G. Richards Julian, the Architect appointed by the Council, is preparing plans for the proposed Workmen's Reading Room. The building is to consist of three rooms that can be opened together for entertainments, and caretaker's Cottage at side.

BATTERSEA (S.W.).—Next the Town Hall, a large Mansion has been secured by Mr. Sprague, the Architect, and Mr. Macham, of Sunderland, and on the site is to be erected a Theatre and Opera House.

BERKHAMSTED.—An event of signal importance in the history of Berkhamsted School was celebrated when the new Chapel was dedicated by the Bishop of Colchester. The Chapel is Late Perpendicular in style, from the designs of Mr. Charles H. Rew, Architect, of Berkhamsted, and the east end is unique among English Churches, being built after the style of the Church of Santa Maria dei Maracoli at Venice.

BETHESDA (WALES).—New Schools are about to be built at Bethesda, Wales, from designs by Messrs. Willink and Thickeness, Architects, of Castle Street, Liverpool.

BOOTLE.—A start has been made with the new Presbyterian Church of England at Bootle. The Church is designed to accommodate 600 persons on the Ground Floor, having no Galleries, and will be built of grey and red brick. It has a large single roof span, divided into bays, with hollow Transepts. There are also Vestries and Rooms for Sunday School purposes. An Organ Gallery is provided at one end of the West Transept. The present Church is to be used as a Schoolroom, with covered connection with the new Church. The Church is expected to be completed in twelve months. Messrs. Raffles and Campbell are the contractors, and Messrs. Woolfall and Eccles, of Castle Street, Liverpool, are the Architects.

BILLINGBOROUGH.—A handsome stained glass window has just been placed in the east end of the Parish Church at Billingborough, Lincolnshire. It is intended to serve as a memorial to the Duke of Clarence and Avondale.

BRIGHTON.—The Brighton Borough Engineer and Surveyor has been instructed to provide an electric passenger lift for the Town Hall at an estimated cost of £538. He states in his report that there are 2,000 such lifts worked by electricity in operation in various parts of the country.

BROADSTAIRS.—The Yarrow Home, Broadstairs, for convalescent children, was opened on Wednesday last. Messrs. Davis and Emanuel were the Architects, and Messrs. Colls, the builders. It contains accommodation for fifty boys and fifty girls in separate Wings, and a special feature of the building is the verandahs facing due south.

BURBAGE.—The new Public Hall at Burbage, near Buxton, has been opened by Lady Goring. The Foundation Stone was laid last autumn. The building is in the open space dividing the new and old Macclesfield Roads, the main front facing the former. The style is Late Gothic. The Hall is 56 ft. by 30 ft., with Entrance, Ticket Office, and Cloak Rooms, and Platform, 30 ft. by 13 ft. The seating capacity of the Hall is 350. At the east end are four shops. The building has been erected by a limited liability company, and the total cost is between £2,000 and £3,000. The Architects were Messrs. Garlick and Flint, Terrace Road, Buxton, and the builder Mr. J. Gladwin.

BURTON-ON-TRENT.—The Board of Guardians has under consideration a report by Mr. Stevenson, Architect, on proposed alterations to the House, including separate Wards, accommodation for nurses, Children's Wards at the Hospital, and enlargement of the Laundry and Wash-house. The estimated outlay is put down at £4,820.

DUBLIN.—On Sunday, the new Organ, which is the memorial gift of the Catholic officers and men of the Royal Irish Constabulary to the Church of the Holy Family, Aughrim Street, was opened. The Organ, which has been built by Messrs. Telford & Telford, is throughout of Irish manufacture, and has been pronounced by competent critics to be a most perfect instrument.

DUMFRIES.—Tenders to the amount of £11,728 11s. 9d. have been accepted for new Academy Buildings for the Dumfries Burgh School Board. The contractors are—for masonry, Messrs. Houston & Robinson; joinery, S. McLachlan; plastering, R. Moffat; plumbing, P. Drummond & Son; painting, H. Haining, all of Dumfries; and R. Mulligan, slater, of Annan; Kean & Wardrop, tile layers, Glasgow.

DURHAM.—For the new County Council buildings, the design marked by the motto of "Demos" has been adopted for execution at a cost not exceeding £22,000, the Architects being Messrs. Harry Barnes and Fredk. E. Coates, A.A.R.I.B.A., of Sunderland. These gentlemen were awarded the second premium by the referee, Mr. MacVicar Anderson, and the first premium was voted to the plan inscribed "Onward" by Messrs. Cooksey & Cox, of the Adelphi, W.C.; but the conditions of the competition required tenders within the amount stipulated, to be submitted for approval before the Council would confirm the adjudicator's recommendation. The tender for building this design by Messrs. Barnes & Coates was stated to be £18,051, which was accepted, leaving a margin, as above stated, of £4,000 for contingencies. The tender for Messrs. Cooksey & Cox's plan amounted to £21,977, with only £23 for contingencies. It was stated that the site in Old Elvet cost £6,000, and that the fittings and furnishings would bring the total cost up to £40,000.

FARSLEY.—At its last meeting the Calverly and Farsley School Board decided to invite five Architects to send in sketch plans for a new School, consisting of Central Hall and five Class Rooms, capable of accommodating 360 scholars.

GATESHEAD-ON-TYNE.—Designs were recently invited from five Architects practising in Newcastle for the new permanent Church of St. George, in the parish of Christchurch. Mr. J. W. Walton-Wilson, F.R.I.B.A., of Shotley Hall, the assessor, selected that submitted by Mr. Stephen Piper, of County Chambers, Westgate Road, Newcastle, and he has since been appointed Architect. The whole scheme is to be carried out at once, inclusive of Tower. The design is Early English in style, consisting of Nave and Aisles lighted by triplet lancets, no clerestories being introduced; shallow Transepts, each having double gabled fronts and Chancel; Tower with belfry and saddleback roof, on south side of West Front, at angle of two thoroughfares. Accommodation will be provided for 630 persons. The contract has been let to Mr. Alexander Pringle, of Gateshead, at £5,900.

GLASGOW.—The Stained Glass Window presented to Greenhead Parish Church, Glasgow, by the Messrs. Tullis, of Bridgeton, has just been completed by Mr. Stephen Adam, St. Vincent Street, Glasgow. The lower portion of the Window—which is a three-light one—represents the Adoration and the gifts of the Kings, and the lower part represents Christ in Glory surrounded by worshipping figures. The Window is a beautiful piece of mosaic glass work, richly coloured, and treated in a fine artistic spirit.

GREAT SAUGHALL.—The Foundation Stone was laid last week of a new Church at Great Saughall, near Hawarden. It is being built from the designs of Mr. Medland Taylor, of Manchester, and will be mainly of brick, with tiled roof.

HACKNEY.—In emulation of their neighbour Shoreditch, the Hackney Vestry has decided to introduce electric light in conjunction with a dust destructor. The scheme has been

entrusted for its elaboration to Mr. Francis Hastings Medhurst, their consulting electrical engineer, who holds similar appointments for Bedford and several other corporations.

HUDDERSFIELD.—The Wesleyans of Lindley, Huddersfield, are commemorating the opening of their first Chapel 100 years ago—a building now used as a Sunday School—by adding a new Chancel to the handsome Gothic Chapel erected in 1867. The Chancel is being built from designs and plans by Mr. Edgar Wood, Architect, of Manchester. The cost will be about £1,500, towards which £1,100 has been subscribed or promised. The scheme includes the provision of Minister's and Choir Vestries and Organ Chamber. The principal feature of the Chancel will be a five light flowing tracery window, which will be filled with stained glass, the gift of Mr. J. W. Sykes, J.P., Lindley. The interior of the Chapel will be finished of polished stone and oak panelling, and will be fitted with oak Choir Stalls and Communion Table, specially designed by the Architect and presented by Mrs. W. A. Whitehead, of Baildon, Bradford and Miss Sykes, of Lindley, "in memory of their sister." Messrs. Bottomley & Sons, of Lindley, are the contractors for masonry, and Messrs. Crowther & Wilkins, of Marsh, are the joiners.

IPSWICH.—In the competition for the Ipswich Workhouse six designs were remitted to the Assessor, Mr. Charles Barry, who has awarded the first premium to Messrs. Stephen Salter, Lister Newcombe, and H. Percy Adams, of 28, Woburn Place, Russell Square, London, and the second to Messrs. Philip Tree and Ivor Price, of 70, Warwick Road, Earl's Court, London. The other Architects who competed were:—Messrs. H. S. Legg and Son, London; Messrs. W. H. Seth-Smith and A. R. G. Fenning, London; Mr. G. W. Leighton, Ipswich; and Messrs. C. Q. Ellison and Son, Liverpool.

At a cost of about £1,200, new School buildings, adjacent to Crown Street Congregational Church, are being erected under the supervision of Mr. Frank Brown, Architect. The Foundation Stone was laid on Tuesday last.

LANCASTER.—St. Luke's Church, Skerton, Lancaster, is proposed to be furnished with a new Chancel, in order to make room near the centre of the Church for the organ, which is attacked by dry rot. The design has been prepared by Messrs. Austin & Paley, Architects, and the estimated cost is about £600.

LEAMINGTON.—The new loop-line which the London and North Western Railway Company has constructed between Daventry and Marton, near Leamington, was recently opened for passenger traffic. The line has been constructed by Messrs. Walter Scott & Co., of Newcastle, at a cost of over £250,000, and is nearly fourteen miles long.

LEDBURY.—Extensive alterations and improvements have been made to the parish Church. The cost of the restoration has been nearly £5,000. Mr. J. L. Pearson, R.A., was the Architect, and Messrs. Bunning, Camberwell, London, were the contractors.

LIVERPOOL.—At the Local Government Board inquiry at the Municipal Offices into the application by the Liverpool Corporation for power to borrow £35,000 for the erection of a new Central Fire Station and District Police Offices, and the extension of the present Police Offices on the site of the present buildings. The Town Clerk stated that the City Surveyor had gone carefully into the question, and estimated £20,000 as a fair proportion for police purposes, and £15,000 for the fire department. The present accommodation for both sections was very inadequate, and the present scheme was the most economical that could be devised to meet the requirements of the city. It did not involve the purchase of any new land, as the present site would be used, and the money required was simply for the erection of new buildings. The present buildings were erected thirty-seven years ago when the population was under 435,000, and the police force numbered less than 1,000. At present the population was

518,000 and the police force 1,600. The lowest tender for the buildings was £33,594, but it was thought there should be a margin for contingencies, and the sum of £35,000 was proposed.

LLANELLY.—The Llanelly Harbour Commissioners have decided to have a new Dock and bucket dredger, at a cost of £100,000. The site of the new Dock is favourably situated, and is a freehold of the Commissioners. It is to the north of the present Carmarthenshire Dock, and is at present a reservoir used for scouring purposes. Its position is a most suitable one, ample room being offered for siding accommodation, and it is noteworthy that it adjoins the Mynydd Mawr line, which connects the great anthracite coalfield with the seaboard. The Dock gates will be 50 ft. wide.

LONDON.—The London County Council has accepted the tender of Messrs. L. Faulkner and Sons, at £111 2s. 10d., for repairs to and painting of the Myatt's Fields boundary wall. The tender of Messrs. McVey for the supply of fencing for Hilly Fields, at £927 19s. 9d., was also accepted. The tender of Mr. S. Kavanagh, at £8,399 17s. 9d., was accepted for rebuilding Lea Bridge.

LYDEARD.—Dr. Kennion, Bishop of Bath and Wells, recently dedicated an Organ just erected by Messrs. Brindley and Foster, of Sheffield, at a cost of £567.

LYNN.—Additions are being made to the Town Hall by Messrs. Young and Co., of Norwich, from plans prepared by Messrs. Tree and Price, of London and St. Leonard's.

MERTHYR TYDVIL.—In this parish, on the 29th July, Mrs. Frederick Harris laid the Foundation Stone of a new place of worship, which is dedicated to St. Matthias. The Architect is Mr. J. L. Pearson, R.A., and the new edifice will cost about £3,000 and seat 350 people. The site was given by Colonel Lockwood.

NEWCASTLE-ON-TYNE.—For strengthening the Lantern Tower of the Cathedral, Mr. Leeson, the Architect, states that the work could be well and substantially done for £1,515, exclusive of Architect's commission and the clerk of work's salary, for which, and for unforeseen circumstances, a further sum of £250 should be added.

On Thursday will be unveiled an alabaster Tablet, with black marble inscription panel, erected in Felling Church, to the memory of the late William Watson Pattinson, J.P., of Felling House. The design is by Messrs. Hicks and Charlewood, Architects, Newcastle. Mr. Beall is the Sculptor.

NOTTINGHAM.—With reference to the site of the proposed new Workhouse, the Local Government Board has, upon the advice of its Architect, Mr. Gordon Smith, requested the Board of Guardians to select a more eligible one. Mr. Gordon Smith, in his report, says:—"The fact of the site having a private road across it is a most serious drawback, and its irregular surface and steep gradient will greatly increase the difficulty of arranging a Workhouse on the site, and will certainly very largely increase the cost of erection. Doubtless these two conditions are capable of being overcome—a tunnel or tunnels may be formed under the road so as to connect one side with the other, and by means of stairs, inclines, and arranging the storeys of the buildings at varying levels, all these difficulties may be either entirely overcome or greatly mitigated. At the same time it has to be remembered that these conditions will very materially add to the cost of the building by reason of the tunnelling, the digging, excavating, levelling, and carting, and the unusual depth of foundations that will be necessary in almost every block of building that may be erected, in order to arrive at the proper levels, and when built, the arrangements will be such as will involve great difficulty and cost in permanent administration and supervision if efficiency is to be maintained."

PICKERING.—A new Roman Catholic Church was consecrated at Pickering, on Tuesday last.

The building was formerly a Salvation Army Barracks. A beautiful Reredos, having tabernacle and canopy of Caen stone, with columns of rough royal marble, has been inserted. It is in the Corinthian style, with rich mouldings and panelled and carved dome, surmounted by a cross, the carvings of dome and capitals and cross being richly gilded. A handsome stained glass East Window, by Mr. Redmond of Whitby, has been inserted, the centre light representing "The Descent from the Cross." The whole of the woodwork is stained and varnished. The work of interior decoration has been ably carried out by Mr. G. M. Robson, of Norton, the woodwork being executed by Mr. J. White, of Whitby, and the plumbing and glazing work by Mr. Remmer, of Pickering.

POCKLINGTON.—The Guardians of Pocklington Union (Yorks) have resolved to enlarge the Workhouse, and plans for the new erection have, therefore, been prepared by Mr. H. L. Tacon, Architect, of Rotherham.

RAINHAM (KENT).—The Architect estimates that the cost of site and buildings for the proposed Cemetery would be £2,365, and he recommends a loan of £3,000; these figures include cost of site, £800; building a Chapel, £900; and a Lodge, £400.

RETFOED.—After a careful examination of the West Retford Bridge, over the River Idle, the Surveyer to the Town Council finds that the bolts which fastened the iron plates to the girders have all been worn away, and will require immediate attention. This accounts for the settlement of the road in places on the Bridge.

RIPON.—From plans and specifications prepared by Mr. Preston, the Local Government Board has decided to borrow £1,100 for the purpose of Highway repairs and a scheme of Water Supply.

STANDON.—The additions to St. Edmund's Roman Catholic College, near Standon, will, when complete, include an Exhibition Hall, which will be used as a study place, ten Class Rooms, Lavatories, Swimming Bath, covered Playground, two Dormitories, a Library for the boys, and a Billiard Room for the Professors. The Architect is Mr. A. E. Purdie. The estimated cost of the undertaking is £4,500.

STRENSALL (NEAR YORK).—A Wesleyan Chapel is being erected, to replace the structure burnt down some months ago. The plans are by Mr. Edward Taylor, Architect, York. The contractors are Mr. H. Creaser, of Strensall, and Mr. G. Mansfield, York.

SWANSEA.—It is proposed to pull down Swansea Parish Church and erect a larger one in its place. The accommodation of the present Church is inadequate, and it is intended to erect, from the designs of Sir Arthur Blomfield, a Church with 1,200 sittings, at a cost of £20,000, of which £15,000 is subscribed.

THORNIEBANK.—The Public Library, which is being built at Thorniebank, N.B., to commemorate the late Mr. Alexander Crum, of Thorniebank, is in the Classic style of Architecture characteristic to Scottish buildings in the 17th century, and the Architect is Dr. Rowand Anderson, Edinburgh. The cost will be about £2,000.

TOTTERDOWN.—New School Rooms are being erected in connection with the Totterdown Free Methodist Church at a cost of £2,500. The Façade is in hammer-dressed blue pennant stone, with dressings of Monk's Park freestone. The work is being carried out from the designs and under the supervision of Mr. William Paul, Architect and Surveyor, of Wells Road, Bristol.

TOXTETH PARK.—Built on the grounds of Richmond Lodge, near Sefton Park Railway Station, by the Urban District Council of Toxteth Park, the new Refuse Destructor and Depot have been opened. The plans were prepared by Mr. John Price, engineer to the District Council. The refuse is tipped inside the Destructor building directly into movable trucks, then directly into the furnaces, through

openings in the top of the cells. The trucks and feeding openings are constructed in accordance with the patents of Messrs. Boulnois and Brodie, and with all the latest improvements. There are six cells or furnaces, erected back to back, with a main flue to carry off the gases placed between, on what is known as the "Fryer" principle as improved by the manufacturers, Messrs. Manlove and Co. The cells are fitted throughout with mechanically self-clinking fire bars, the patent of Mr. Thomas Henderson, of Trueman Street, Liverpool. The total expenditure has been £7,888 8s. 5d. Mr. Price also prepared the plans for the Town depot, consisting of Manager's House, Weigh-house, Stabling for ten horses, cart sheds, yard, with apartments for a horsekeeper and fireman. The cost of the depot was:—Buildings (Mr. T. Spencer, Aintree), covered vans, horses and harness, &c., £3,035.

WEDNESBURY.—The Corner Stone of a Girls' Department in connection with the Parish Church Schools, Church Hill, has been laid by the Mayor. The new building is to stand on land adjacent to the old Schools, and with certain alterations of the existing buildings will afford additional accommodation for 300 children, whilst improved outbuildings will be provided. The work is being carried out by Messrs. Morriss and Atkinson, Lansdown Street, Birmingham, from designs by Mr. J. H. Gibbings, City Road, Birmingham.

WESTON-SUPER-MARE.—New Schools are to be erected for the School Board, at Weston-super-Mare. They are designed to accommodate 999 children, and will be built from plans by Messrs. Price & Wooler, Architects, of Weston-super-Mare.

WORTLEY.—From the designs of Messrs. Kay & Twist, Architects, of Park Row, Leeds, a new Church is shortly to be built at Wortley, Leeds.

YEADON.—New Conservative Club and Premises are about to be erected from plans by Mr. Harold Chippindale, Architect, of Guiseley.

YORK.—On Friday the Monument erected in York Minster to the memory of the late Archbishop Thomson will be unveiled. The Monument consists of a recessed Altar Tomb, designed by Mr. G. F. Bodley, A.R.A., with a life-sized recumbent effigy by Mr. Hamo Thornycroft, R.A. The site of the Monument is in the South Transept, just outside the entrance to the South Choir Aisle.

M. HENRI BLONDEL, 71 years of age, the most enterprising builder in Paris, who erected the Continental Hotel, the Labour Exchange, and 172 Dwelling Houses, has been fined 3,000fr. for "simple"—that is to say, non-fraudulent—bankruptcy. His liabilities are said to exceed £1,000,000.

A SCHEME is on foot to erect a Drinking Fountain at Cockermouth, to commemorate the fact that William Wordsworth was born in that town on April 7th, 1770. Such a memorial would be a suitable adjunct to the new park which Mrs. Harris has given to the town, and which will be formally opened next week.

AN old landmark in the city of Wakefield is to be restored in the re-construction of the Tower of St. John's Church, which was removed at the end of 1884 on account of its unsafe and dangerous condition. The cost of the work is estimated at from £2,500 to £3,000.

THE Over Wyresdale Township having agreed to erect and maintain a Bridge over the Wyre at Abbeystead, subject to the Lancaster Corporation keeping the bed of the river in repair, the Corporation has assented to the proposal.

THE Local Government Board has authorised the purchase of the Tooting College Estate by the Wandsworth and Clapham Board of Guardians for the sum of £40,000 as a Home for the aged and infirm poor.

THE Accrington and Church Outfall Sewerage Board was fined £280 at the Blackburn County Court recently for disobeying an order to carry out a sewerage scheme within eighteen months. The fine was at the rate of £10 for each day of default.

The Builders' Journal COMPETITIONS.

No. 5.—A Cottage Hospital.

Designs are required for a Cottage Hospital on a Corner Site in a County Town. Provision must be made for twelve beds (six women and six men), with Matron's and Superintendent's Apartments, Convalescent Room, and all necessary domestic and sanitary accommodation. A sum of three thousand pounds may be expended on the building and terrace. Designs to reach the Editor not later than Monday, August 26th, 1895.

RULES.

- 1.—There must not be more than three separate sheets of drawings submitted by any competitor in any single competition.
- 2.—The scale must be a uniform one of 8 feet to the inch for plans, elevations, and sections. Detail drawings must be to half-inch scale, and a perspective in ink may be included.
- 3.—All drawings must be inked in, and be without colour or wash.
- 4.—Drawings in each competition must be sent in on the date specified, and must be submitted under a motto, accompanied by the name and address of each competitor in a sealed envelope.
- 5.—All competitors must be under the age of twenty-six.
- 6.—A public exhibition of the premiated designs will be held. The result of each monthly award will be announced in our columns and the assessors' reports will be published in full. The Drawings will remain the property of their authors, but we shall reserve the right to reproduce any we think fit.

THE AWARDS.

- 1.—A Gold Medal and a Cheque for £10 10s., to the competitor who submits the best half-dozen sets of drawings during the session of twelve months.
- 2.—A Silver Medal and a Cheque for £3 3s., to the competitor who submits the best single set of drawings during the session.
- 3.—Certificates signed by the Assessor and countersigned by THE BUILDERS' JOURNAL, will be awarded to the authors of the premiated designs in each competition, who will each receive a cheque for half-a-guinea for out of pocket expenses.
- 4.—At the end of the session the whole of the premiated designs will be submitted to a committee composed of the monthly assessors, and the Gold and Silver Medals and cheques will be awarded by them.

Editorial.

THE EDITOR will be glad to read any suitable matter submitted to him, and will return all MSS. when stamps are sent to pay postage.

All matter must reach the Editor by the first post on Saturday morning to ensure its treatment in the current issue.

Publishing.

The terms for free post Subscription to any part of the United Kingdom are SIX SHILLINGS AND SIXPENCE per annum by half-yearly or annual prepayments.

Advertising.

SITUATIONS WANTED, SITUATIONS VACANT, PARTNERSHIPS, APPRENTICESHIPS.

Per line, Sixpence. Minimum charge, Eighteenpence. Three Insertions for the price of Two.

Prepayment in the above Advertisements is absolutely necessary.

Page or Paragraph Announcements, Trade Advertisements.

Prices on application.

Small Advertisements for current week's issue are received up to first post Monday morning inclusive.

Editorial and Publishing Offices:

Talbot House, Arundel Street,
Strand, W.C.

THE new Free Library, at West Hartlepool, will be opened by Mr. W. C. Ward-Jackson, in October.

A BRASS Tablet to the late Bishop Sillitoe, first Bishop of New Westminster, has been placed in the Cathedral, New Westminster. The memorial is in the form of a shield, bearing a suitable inscription.

THE new buildings of the Cambridge Training College for Women Teachers, which were erected by means of the Pfeiffer Bequest, have just been completed. They will be formally opened on October 19th.

THE Leigh and Atherton Joint Sewerage Board proposes borrowing £45,000 for the purposes of sewerage and sewage disposal.

A MASSIVE granite Monument was unveiled on Sunday morning in Uxbridge Cemetery, to the memory of the Chartist poet, John Bedford Leno, who is there buried.

THE Doncaster Rural District Council proposes to borrow £7,500 for the purpose of providing sewage and sewage disposal works for Bolton-on-Dearne and Goldthorpe.

SOCIETY MEETINGS.

Essex Archaeological Society.—On Thursday the Essex Archaeological Society visited Saffron Walden for the purpose of its annual meeting. A large number of members, with Mr. Beaumont, proceeded to Audley End Mansion, which was thrown open by the Right Hon. Lord Braybrooke. Having journeyed to Saffron Walden, the Church was visited, where the Rev. W. E. Layton read a paper. After this the party visited the Museum, when papers were read by Mr. G. Maynard, the curator, describing the rise and progress of the Museum from its formation in 1832 to its present time. Mr. Maynard afterwards read a short paper on the early history of the Castle ruins.

Builders' Benevolent Institution.—This Charity held its forty-eighth annual meeting on Thursday, July 25th, at the offices, 35, Southampton Row, Bloomsbury. Mr. Basil P. Ellis (the President) occupied the chair, supported by Messrs. George Plucknett, J.P. (Hon. Treasurer), Thomas Stirling, W. Scrivener, E. M. W. Goslett, and other friends of the Institution. The Secretary (Major Bruton) read the annual report, which stated that the Institution continues to carry into effect its purposes as usual, the only drawback being the need of increased income to provide for all the necessitous applicants who seek the benefits of the Charity. This is especially to be regretted, because some are very aged before making their wants known. The Committee's efforts have been much hampered by the diminution of subscriptions, consequent upon the death of many regular subscribers, and this makes it an earnest and urgent matter to endeavour to obtain new subscribers and donors, in order to maintain the Institution. This state of affairs cannot be too widely known to the patrons. A movement has been set on foot for the Secretary to call and solicit subscriptions or donations from all members of the building and allied trades within the metropolitan district, which it is hoped will be attended with good practical results. At the present time there are forty-six pensioners on the funds, while others are waiting for election until the income is sufficient. Four female pensioners have died within the past year; one man and one woman have been elected. The Committee strongly expresses its gratitude to the President, Mr. Basil P. Ellis, for the lively interest he takes in the transactions of the Institution, and for his determination to get very liberal contributions to the Charity. It also offers its thanks to the stewards of the annual dinner, and to the Honorary Auditors for their services. The Committee has further the pleasure to announce that Mr. John Mowlem Burt, J.P., D.L., has accepted the Presidency for the ensuing year, and will preside at the annual dinner on November 7th next, in the Hall of the Worshipful Company of Carpenters, London Wall. On the motion of Mr. Thomas Stirling, seconded by Mr. Goslett, the report and balance-sheet were unanimously adopted. Mr. Plucknett proposed a cordial vote of thanks to the outgoing President for his exertions in aid of the Institution during the past twelve months. Mr. Stirling seconded the motion, which was carried by acclamation. The President returned thanks, and said that he was pleased he had been able to do something for the charity. The success which had already attended the movement for increasing the number of subscribers was largely due to Major Bruton, who had been most assiduous in calling upon those who were likely to help. Votes of thanks were also passed to the Vice-Presidents and Trustees, to the Hon. Treasurer (Mr. Plucknett), who was re-elected, and to the Hon. Auditors. The retiring members of Committee were also reappointed, with the addition of Mr. Ellis. On the motion of the President, Mr. John Mowlem Burt, J.P., D.L., was elected President for the ensuing year.

A MOTION has been laid on the table of the Paris Municipal Council to erect on one of the public squares of the capital a Statue of Sir Isaac Newton. It is most likely that the motion will be carried without opposition, and that a Monument will be erected to the discoverer of the laws of gravitation near the Monument to the author of "Hamlet."

Trade and Commerce.

Edison and Swan United Electric Light Company.—In moving the adoption of the report to 30th June last, at the annual meeting of this Company held at Cannon Street Hotel last week, Mr. J. S. Forbes said they had been subjected to severe competition since their patents expired last year. The profit, however, for the year had amounted to £25,876, and after payment of interest on debenture stock there was £21,376 left. An interim dividend at the rate of 5 per cent. had been paid for the first six months of the year, and a similar one was now recommended, carrying forward £3,702. More business, had been done but the amount of profit accrued was smaller in consequence of reduced prices. The Earl of Lichfield seconded the adoption of the report, which was carried.

TENDERS.

Information from accredited sources should be sent to "The Editor." No results of tenders can be accepted unless they contain the name of the Architect or Surveyor for the work.

BARNSELY.—Accepted for the erection of five houses, &c., Old Mill-lane, for Mr. William Foulstone. Messrs. Senior and Clegg, architects, 15, Regent-street, Barnsley. Quantities by architects:—

Taylor, E. R., Barnsley, masonry ...	£860	0	0
Duncan and Jones, Ardsley, near Barnsley, joinery ...	310	0	0
Ashworth, H., Barnsley, plumbing ...	43	0	0
Marshall, T., Barnsley, plastering ...	81	0	0
Fleming, M., Barnsley, slating ...	64	0	0
Beaumont Bros., Barnsley, painting...	17	17	0

BARNSELY.—For the erection of three houses, &c., Fitzwilliam-street, Hoyland-common, for Mr. Jackson. Mr. W. J. Sykes, architect, Hoyland, near Barnsley:—

Hogue, M. A., Hoyland-common, near Barnsley ...	£547	10	0
---	------	----	---

* For the whole of the works.

BRENTFORD.—For the erection of Public Baths, Cliden-road, for the District Council:—

Godson and Sons ...	£6,077	0	0
Higgs ...	6,075	0	0
Hansen ...	5,651	0	0
Hughes, R. N. ...	5,437	0	0
Ford and Sons ...	5,346	0	0
Bloomer, John ...	4,999	0	0
Ball, John ...	4,904	2	4
Barnes, James, Brentford ...	4,850	0	0

* Accepted.

BRISTOL.—For the execution of street works under the Private Street Works Act, 1892, for the St. George Urban District Council. Mr. T. L. Lewis, surveyor, Parochial Offices, St. George, near Bristol.

Thomas and Webb ...	£3,102	0	0
Martin, Frederick ...	128	0	0

* For Gratitude-road, Co-operation-road, St. Mark's-grove, Graham-road, Calybrook-street, Victoria-road, Heber-street, Bellevue-road, Brighton Park, Hanover-street, Nicholas-road, Beaconsfield-road, Salisbury-street.

† Victoria Park. Two mile hill.

BRISTOL.—For the excavation and construction of lake, &c., St. George, for the Urban District Council. Mr. T. L. Lewis, engineer and surveyor, Parochial Offices, St. George, Bristol. Quantities by the engineer:—

Stone, J. E. ...	£4,222	19	10
Williams, John ...	2,466	13	2
Wilkins, G. H. ...	2,369	1	4
Lloyd and Powell ...	2,211	9	11
Thomas and Webb ...	1,739	15	5
Jones, George ...	1,732	6	7
Martin, Fredk., St. George ...	1,450	9	6

[Engineer's estimate, £2,061.]

* Accepted.

BUSHEY (HERTS).—For new photo-etching works, for Messrs. André and Sleight, Limited. Messrs. J. E. K. and J. P. Cutts, architects, 34, Maiden-lane, Covent Garden:—

Miskin, C. ...	£4,488	0	0
Judge, W. ...	4,280	0	0
Darvill, J. ...	4,123	0	0
Turner, T., Ltd. ...	4,061	0	0
Brightman, C. ...	3,795	0	0
Clifford and Gough ...	3,765	0	0

CARDIFF.—For the erection of fireproof warehouses, Tunnel-court, for Mr. J. J. Lewis. Mr. David C. Salmond, C.E., architect, 7, Windsor-place, Cardiff. Quantities by architect:—

Waterman, T. R. ...	£3,313	5	2
Cox, R., and Bardo ...	3,197	0	0
Shepton, S., and Son ...	3,160	0	0
Keene and Wells ...	3,158	0	0
Davies, D. J. ...	3,100	0	0
Allan, James ...	3,100	0	0
Davies, David ...	3,080	0	0
Gibson, Henry ...	3,000	0	0
Venning, J. H. ...	2,968	5	1
Scott and Williams ...	2,940	18	8
Gibson, John ...	2,916	0	0
Evans, E. R., and Bros. ...	2,895	8	0
Turner, E., and Sons ...	2,888	0	0

[All of Cardiff.]

COLCHESTER.—For building Catholic Schools in Priory-street. Mr. W. Scargill, architect:—

Diss, Alfred (accepted conditionally) ...	£1,300	0	0
---	--------	---	---

Boundary wall to above.

Wiles (accepted conditionally) ...	44	0	0
------------------------------------	----	---	---

BURTON-ON-TRENT.—For the erection of a sixty-quarter malting in Wood-street, for Messrs. R. Peach and Co. Mr. R. Stevenson, architect, Imperial chambers, Burton-on-Trent. Quantities by the architect:—

	Wood and Concrete Floors.	Iron and Concrete Floors.
Chamberlain Bros	£5,428 0 0	£5,349 0 0
Kennard, Geo.	5,338 0 0	5,449 0 0
Hunter, J. and J.	5,300 0 0	5,365 0 0
Walker and Slater,		
Derby	5,250 0 0	5,325 0 0
Hodges, Geo.	5,228 0 0	5,284 0 0
Kershaw, R.	5,200 0 0	5,335 0 0
Stevenson, W. A.	5,198 0 0	5,260 0 0
Lowe, T. and Sons	5,170 0 0	5,240 0 0
Edwards, Henry	5,106 10 0	5,249 0 0

[Rest of Burton-on-Trent].

* Accepted.

CRICKHOWELL (WALES).—For the erection of a villa-residence, near Llangatock Wharf, for Mr. Wm. Thomas and Mr. John Richards. Mr. John Vaughan Richards, architect, Llangatock, Crickhowell. Quantities by architect:—

Jones, T. and Sons	£486 10 0
Morgan, Thomas	470 0 0
Griffiths, George, Crickhowell	378 10 0

* Accepted.

DARLINGTON.—Accepted for additions to the Training College, for the Committee of the Training College. Mr. J. P. Pritchett, architect, 24, High-row, Darlington. Quantities by the architect:—

Slougill, H., Darlington, brick, stone, and plaster work	£620 3 7
Atkinson, J., and Son, West Hartlepool, slating	75 15 0
Renshaw, J., Darlington, carpentry and joinery	305 0 0
Lishman, T., Darlington, plumbing and glazing	105 0 0
Metcalfe, T., Darlington, painting	17 10 0
School Furnishing Co., Darlington, science fittings	128 15 0

DUNDEE.—Accepted for additions to the Royal Asylum Mr. T. S. Robertson, architect, St. Andrew's-buildings, Seagate, Dundee:—

Bruce, John, Lochee, masonry.
Morrison, John, Lochee, joinery.
Brown, David, Dundee, plumbing.
Buttar, Andrew, Dundee, slating.
Labrine, James, Dundee, plastering.
Lindsay and Scott, Dundee, glazing.
Nicoll, G. H., and Co., Dundee, tile laying.
Beath and Keay, Dundee, steel beams.
Total, £3,600.

GLOUCESTER.—For the erection of a sanitary depot, &c., Seymour-road, for the Corporation. Mr. R. Read, C.E., City Surveyor, Guildhall, Gloucester. Quantities by Mr. F. E. Godwin, Heathville-road, Gloucester:—

Forse, H. A.	£6,335 0 0
Wilkins, G. H., and Co.	6,300 0 0
King, Alfred, and Sons	6,298 0 0
Bowers, Wm., and Co.	5,791 18 4
Jones, D. C., and Co.	5,785 15 10
Gurney Bros., Gloucester (accepted)	5,677 0 0

GODALMING.—For proposed new house, Holloway-Hill, Godalming, Surrey, for Mr. Stephen Day. Messrs. Welman and Street, architects, Godalming and Guildford, Surrey. Quantities supplied by Mr. Henry Theobald, 48, Finsbury-pavement, London, E.C.:—

Higglett and Hammond	...	...	£1,997	0	0
Tompsett and Kingham	...	...	1,940	0	0
Humphreys	...	...	1,810	0	0
Horn	...	...	1,744	0	0
Harris and Son	...	...	1,695	0	0
Mitchell Bros.	...	...	1,665	0	0
Milton (accepted)	...	...	1,660	0	0
GRANTHAM.—For the erection of citadel buildings, London-road, for the Salvation Army. Mr. Alex. Gordon, architect, 101, Queen Victoria-street, E.C. :—					
Guttridge, J.	...	...	£2,189	0	0
Hockley and Son	...	...	1,725	5	0
Burrows, H., and Sons	...	...	1,697	10	0
Smith, J. J., and Co.	...	...	1,550	0	0
Morgan, T.	...	...	1,531	14	8
Hipwell, Solder	...	...	1,520	0	0
Walker Bros. and Parks	...	...	1,500	0	0
Rhodes Bros.	...	...	1,475	0	0

GUILDFORD.—For drainage of twenty-three houses in Pannell's-terrace, Chertsey-street, Guildford, for Mr. Frederick Ballard. Mr. A. J. Sturges, architect and surveyor, High-street chambers, Guildford:—

May, P. C.	£623 0 0
Higglett and Hammond	575 0 0
Stanley, Ellis	558 0 0
Smith, Robert	508 0 0
Cunliffe, W., Kingston-upon-Thames	420 0 0

* Accepted subject to modification.

HANLEY (STAFFS.).—For the erection of school buildings, Cauldon-road, for the School Board. Mr. E. E. Scrivener, architect, Howard-place, Hanley. Quantities by architect:—

Whitfield, Wm.	£3,959 0 0
Godwin, T.	3,935 11 0
Bennett, N.	3,858 0 0
Bagnall, J.	3,791 10 0
Cornes, C.	3,775 0 0
Embery, H. P.	3,700 0 0
Cooke, Wm.	3,690 0 0
Ellis, G., Hanley (accepted)	3,680 0 0

HIGHWORTH (WILTS.).—For the erection of school buildings, for the School Board. Messrs. Bishop and Pritchett, architects, Regent-circus, Swindon. Quantities by the architects:—

Wheeler, W. A.	£4,760 0 0
Webb, J.	4,520 0 0
Wiltshire, G.	4,496 0 0
Barrett, T.	4,493 0 0
Williams, C.	4,469 17 0
Williams, J.	4,396 0 0
Thomas, J., Highworth (accepted)	4,230 0 0

HITCHIN.—For building a house in Highbury-gardens, Hitchin, for Mr. Walter Whiting. Mr. Ellis Raves, architect, Welwyn, Herts:—

Foster, M.	£845 0 0
Wilmott, J. (accepted)	745 0 0

HULL.—Accepted for the erection of five houses and dairy farms, Sutton. Messrs. Freeman, Son, and Gaskell, architects, Albert-chambers, 11, Carr-lane, Hull:—

Good, Edward, Hull	£2,080 0 0
--------------------	------------

HULL.—Accepted for the erection of residence, on the Spring Bank. Messrs. Freeman, Son, and Gaskell, architects, 11, Carr-lane, Hull:—

Robinson, D. R., Hull	£568 19 0
-----------------------	-----------

KINTORE (ABERDEENSHIRE).—For additions to school buildings. Messrs. Ellis and Wilson, architects, 181A, Union-street, Aberdeen:—

Smith, John, Kintore, building.
Craig, A. H., Kintore, carpentry.
Mitchell, Geo., Inverurie, slating.
Moir, Robert, Inverurie, plastering.
Grant, G., and Son, painting.
Laing, Jas., and Son, plumbing.
Total £515 14s.

LLANDILO (WALES).—For the erection of a school-house, Gwaun-cae-Gurwen, for the Building Committee. Mr. J. W. Jones, architect, Gwly House, Llandilo:—

Thomas and Steaphans	£374 13 0
Thomas, David	370 0 0
Walters Bros.	310 18 0
Williams, Jno., Gwmors, Gwaun-cae-Gurwen (accepted)	286 16 0

LONDON.—For new drainage works and repairs at Weymouth-terrace, Hackney-road, for Messrs. Masters Bros. Messrs. W. Bradbear and Co., architects, Canonbury Station, N.:—

Thomerson and Son	£168 10 0
Steel, W.	117 9 0
Poole, W.	110 13 0

LONDON.—For new drainage works and repairs at Grosvenor House, Canonbury. Messrs. Bradbear and Co., architects, Canonbury Station, N.:—

Barker, G.	£195 0 0
Steel, W.	193 0 0
Smith, T. P.	185 0 0

LONDON.—For the erection of shops and granary, at Dulwich, for Mr. Thos. King. Messrs. W. Bradbear and Co., architects, Canonbury Station, N.:—

Courtney and Fairbairn	£3,307 0 0
Welsh and Son	2,961 0 0
Thomerson and Son	2,692 0 0
Steel	2,612 0 0
Barker	2,320 0 0
Simpson and Cove	1,988 0 0
Hood	1,785 0 0

LONDON.—For alterations and additions at 8, England's-lane, N.W., for Messrs. French and Co. Mr. John Moir Kennard, architect, 13, Railway-approach, London Bridge:—

Lamble, S. and R.	£1,117 0 0
Pritchard and Kennick	1,073 0 0
Gould	990 0 0
Lascelles	975 0 0
Sumner and Co., Limited	898 0 0

LONDON.—For alterations and additions to the "Lord Raglan" Tavern, Wandsworth-road, for Mr. H. T. Fowler. Mr. Thomas Milbourn, architect, 12, Beaulieu Villas, Finsbury-park:—

Lovejoy	£2,500 0 0
Lathey Bros.	2,370 0 0
Spencer and Co.	2,150 0 0
Beer and Gash	2,097 0 0
Turtle and Appleton	1,990 0 0
Anley	1,976 0 0
Walker	1,850 0 0

LONDON.—For providing additional urinal accommodation for the Finance Department in the rear of the head office of the School Board for London, and for other work. Mr. T. J. Bailey, architect:—

Davis Bros.	£1,130 0 0
Hornett, W.	947 0 0
Downs, W.	637 0 0
Lily and Lily, Ltd.	529 0 0
Marchant and Hirst	520 0 0

Nightingale, B. E., Albert Embankment

* Recommended for acceptance by the Works Committee.

LONDON.—For taking down five partitions and providing and fixing eight new partitions in the boys' and girls' departments of the Tennyson-street School, Battersea, and for other works, for the School Board for London. Mr. T. J. Bailey, architect:—

Marsland, J.	£800 0 0
Hammond, W.	705 0 0
Holloway Bros.	703 0 0
Lathey Bros.	699 0 0
Garrett and Son	664 0 0
Goad, W. V.	642 0 0
Downs, W.	610 0 0
Peacock Bros.	582 0 0
Higgs, F. and H. F., Loughborough Junction	560 0 0

* Recommended for acceptance by the Works Committee.

LONDON.—For alterations, repairs, and fittings at the "Warburton Arms" public-house, Mare-street, Hackney, N.E., for Messrs. Holt and Co. Mr. Fred. A. Ashton, architect, 3, Crooked-lane, E.C.:—

Alterations, &c.	Fittings.	Total.
Maddison, W. J.	£1,470	£485
Shurmer, W.	1,377	495
Watson, W.	1,185	577
Cocks, J. and H.	1,167	565
Hearle & Farrow	1,149	548

JOHN BENNETT, 32, Guilford Street, London, W.C.
GRANITE, MARBLE, MOSAIC & TILE WORK OF EVERY DESCRIPTION.
ESTIMATES AND DESIGNS FREE.
WORKS: 1, 19 & 20, BRUNSWICK MEWS, W.C.

METAL CASEMENTS of every description. GLASS ROOFING Shelley & Co's & Hopes Patents	HENRY 55 LIONEL ST. BIRMINGHAM HOPE LONDON, 15 King St. Cheap-side. MAN - CHESTER & Exchange Arcade.
--	--

BRICKS 2½ or 3 inch **PRESSED BRICKS**
 Cheaper & Better than **STOCKS**.
LESS LABOUR, LESS MORTAR, STRONGER WORK; ALSO GREATER RESISTANCE TO FIRE & WATER.
Low Quotations for Truck Loads of Three Thousand to any London or Country Railway Station.
A. W. ITTER, Brick Manufacturer, Fletton House, PETERBOROUGH.
 Brickworks and Railway Siding on Great Eastern Railway.

"ECLIPSE" PATENT GLAZING.

The only Absolutely Imperishable Glazing.

Extensively used during the last fourteen years for H.M. Government, the principal Railway Companies and Corporations, and for all kinds of Buildings in all parts.

MODELS AND ALL PARTICULARS ON APPLICATION. ESTIMATES FREE.
MELLOWES & CO., Works, SHEFFIELD. LONDON, 21, Bishopsgate St. Without, E.C.
 Telegraphic Addresses—"ECLIPSE," SHEFFIELD. "MELLOWES," LONDON.

CARTER & CO.
TILES MOSAIC FAIENCE
Poole Dorset

ROBT. ADAMS, 67, Newington Causeway, London, S.E.

These marvellous
Double and Single
Action, Silent,
Adjustable, and
Self Compensating

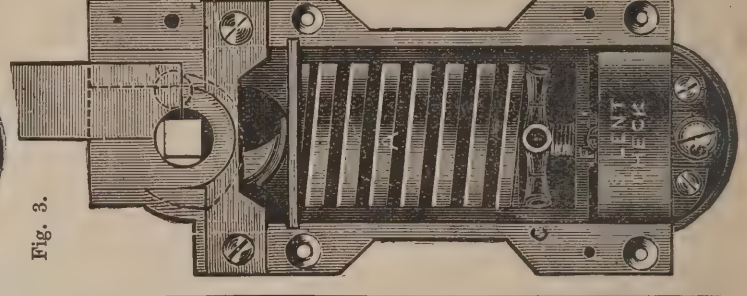
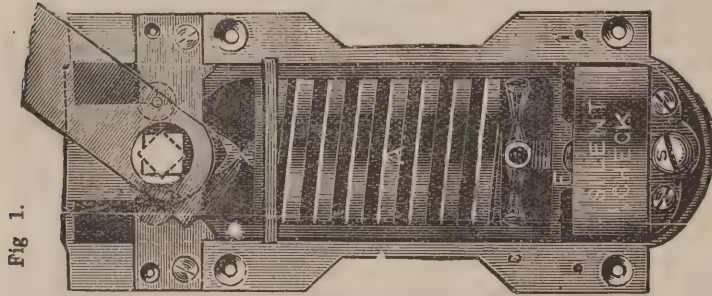
SPRING
HINGES

Guaranteed to last
longer and work better
than any hitherto
made.
CAN BE FITTED TO
ANY DOOR.

Fig. 1 (Silent).
A Double-Action
Spring Hinge
which opens to and
closes from the angle
of 135°

Fig. 3 is the new
Single Action Spring.
It opens to and closes
from the angle of 180°
i.e., "wide back."

THE FIRST
SPRINGS EVER
PRODUCED WITH
THESE GREAT
ADVANTAGES.



LONDON.—For providing and fixing a complete system of low pressure hot water apparatus for warming the whole of the Amberley-road School, Harrow-road, for the School Board for London:—

Gray, J.	£457	0	0
Fraser, J. and Son	442	0	0
Clarke, J. F., and Sons... ..	428	0	0
Purcell and Nobbs	423	0	0
Cannon, W. G., and Sons	423	0	0
May, J. and F.	412	0	0
Vaughan and Brown, Ltd.	388	0	0
Potter, T., and Sons, Ltd., Oxford-street*	369	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For providing and fixing hot-water coils and a boiler at the Eglinton-road School, Plumstead, for the School Board for London. Mr. T. J. Bailey, architect:—

Russell and Co.	398	0	0
Maguire and Son	384	7	0
Vaughan and Brown, Ltd.	350	0	0
Fraser, J., and Son	347	0	0
Cannon, W. G., and Sons	342	10	0
Comyn Ching and Co.	337	0	0
Clarke, J. F., and Sons, Moorgate-street*	312	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For the erection of an orphanage (St. Pancras Female Orphanage), for the Governors. Mr. H. H. Bridgman, architect, 42, Poultry, E.C. Quantities by Mr. S. G. Goss, 16, John-street, Bedford-row:—

Higgs and Hill	£6,234	0	0
Patman and Fotheringham	6,026	0	0
Nightingale, B. E.	5,993	0	0
Perry and Co.	5,899	0	0
Lawrence, E., and Sons	5,850	0	0
Boyce, T.	5,800	0	0
Vernall, Danes and Co.	5,797	0	0
Simpson and Son	5,704	0	0
Williams, Howell J.	5,687	0	0
Gregar	5,487	0	0
Toms	5,449	0	0
Wall	5,391	0	0
Scrivener	5,338	0	0
Richardson	5,315	0	0
Lamble	5,249	0	0

LONDON.—For the erection of additional class-room for the infants' department of the West Ham Parish Schools, for the Rev. R. Arnold Pelly, M.A., and managers. Messrs. Newman and Jacques, architects, 2, Fen-court, E.C.

Cheffins	£315	0	0
Reed and Son	309	0	0
Bishop and Webb	275	0	0
Scott	273	0	0
Hosking	238	0	0
North Bros.	227	0	0

LONDON.—For converting the building in Thames-street, Limehouse, at present used by the boys (which provides accommodation for 480 children), and for erecting a new department for boys, to accommodate 384 children, and for other work, for the School Board for London. Mr. T. J. Bailey, architect:—

Gregar, W., and Son	£17,986	0	0
Reed, A., and Son	16,581	0	0
Longley, J., and Co.	16,412	0	0
Shillitoe, J., and Son	16,250	0	0
Dabbs, W. M.	16,073	0	0
Shurmur, W.	15,620	0	0
Lawrance, E., and Sons	15,465	0	0
Treasure and Son	15,255	10	0
Patrick, J. and M.	15,151	0	0
Roberts, L. H. and R.	15,105	0	0
Cox, C., Hackney*	14,994	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For over-hauling the heating, cooking and Laundry apparatus at the Highbury-grove Truant School, for the School Board for London:—

Fraser, J., and Son	£296	0	0
Potter, T., and Sons, Ltd.	255	0	0
May, J. and F.	185	0	0
Clarke, J. F., and Sons... ..	159	0	0

Benham and Sons, Limited, Wigmore-street, W.* 156 10 0

* Recommended for acceptance by the Works Committee.

LONDON.—For providing and fixing glazed sliding partitions in the girls and infants' departments of the Laxon-street Schools, Bermondsey, for the School Board for London:—

Johnson and Co.	£230	0	0
Leeks and Hooker	210	0	0
Marsland, J.	145	0	0
Downs, W., Walworth-road*	139	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For the enlargement of the Marsh-lane School, East Greenwich, by 384 places, for the School Board for London. Mr. T. J. Bailey, architect:—

Holt, W., and Sons	£3,774	0	0
Reed, A., and Son	3,640	0	0
Higgs, F., and H. F.	3,558	0	0
Nightingale, B. E.	3,386	0	0
Smith, J., and Sons	3,275	0	0
Kirk and Randall	3,198	0	0
Mid-Kent Building and Contracting Works, Ltd.	3,160	0	0
Shillitoe, J., and Son	2,950	0	0
Proctor, E., Woolwich*	2,750	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For erecting offices for all departments of the Latimer-road School, Notting Hill, and also for providing a new system of drainage for the whole school, with the exception of the cookery centre, for the School Board for London. Mr. T. J. Bailey, architect:—

Yerbury, R. A., and Sons	£1,525	0	0
Parker, G.	1,499	0	0
McCormick and Sons... ..	1,478	0	0
Triggs, E.	1,410	0	0
Nightingale, B. E.	1,376	0	0
Lyford, G.	1,364	0	0
Polden, S.	1,360	17	0
Cowley and Drake	1,295	0	0
Vernall, Danes, and Co., 12, Albany-street*	1,253	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For the enlargement of the Lombard-wall School, Charlton, by 336 places, for the School Board for London. Mr. T. J. Bailey, architect:—

Nightingale, B. E.	£11,733	0	0
Smith, J., and Sons	11,579	0	0
Cox, C.	11,534	0	0
Reed, A. and Son	11,513	0	0
Downs, W.	11,460	0	0
Longley, J., and Co.	11,402	0	0
Patrick, J. and M.	10,884	0	0
Shillitoe, J., and Son	10,835	0	0
Kirk and Randall	10,815	0	0
Treasure and Son, Harringay*	10,053	0	0

* Recommended for acceptance by the Works Committee.

LADDERS, BARROWS, STEPS,
TRESTLES, SCAFFOLDING,
For Sale or Hire.

J. BATCHELAR & CO.,
48, HAMMERSMITH ROAD, W.

ESTABLISHED 1866.

J. J. ETRIDGE, Jr.
SLATE MERCHANT,
SLATER and TILER.

ESTIMATES GIVEN FOR *

SLATING AND TILING,

To be Executed by Contract in any part
of ENGLAND.

Penrhyn-Bangor,
Oakeley-Palmerston,

And other description of Slates ready for immediate
delivery to any Railway Station.

Applications for Prices, &c., to

BETHNAL GREEN SLATE WORKS,
Bethnal Green, London, E.

LONDON.—For forming a boiler room in connection with the new system of heating apparatus about to be provided at the Great College-street School, Camden Town, and for other works, for the School Board for London. Mr. T. J. Bailey, architect:—

Vernall, Danes and Co.	£395	0	0
Yerbury, R. A., and Sons	358	0	0
Cowley and Drake	355	0	0
Ballard, W. T.	344	5	0
Sparks, A. M.	334	0	0
Marchant and Hirst	313	0	0
Kirby and Chase, Hornsey-road*	278	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For taking down two partitions on the first and second floors of the Holden-street School, Battersea, and for providing four new partitions in lieu thereof, for the School Board for London. Mr. T. J. Bailey, architect:—

Hammond, W.	£414	0	0
Holloway Bros.	397	0	0
Lathey Bros.	375	0	0
Williams, R. E., and Sons	320	0	0
Downs, W.	315	0	0
Garrett, J., and Son, Old Town, Clapham*	235	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For taking down and rebuilding walls, gateways, &c., at the Waller-road School, Hatcham, for the School Board for London. Mr. T. J. Bailey, architect:—

Mid-Kent Building and Contracting Works, Ltd.	£368	0	0
Oldman, J. and A. l... ..	305	0	0
Akers, W., and Co.	292	0	0
Bowyer, J. and C.	254	0	0
Frampton, J.	249	0	0
Nightingale, B. E.	225	0	0
Leney, H., Penge*	200	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For the erection of a school on the site Faraday-street, Portland-street, Walworth, to provide accommodation for 894 children, for the School Board for London. Mr. T. J. Bailey, architect:—

Patrick, J. and M.	£15,925	0	0
Miskin, C.	15,900	0	0
Marsland, J.	15,455	0	0
Downs, W.	15,350	0	0
Smith, J., and Sons	15,260	0	0
Wallis, G. E., and Sons	15,133	0	0
Charteris, D., Page-street, Westminster*	14,978	5	1

* Recommended for acceptance by the Works Committee.

LONDON.—For dividing two large class-rooms in the boys' and girls' departments of the "Victoria" Schools, Starch-green, into four rooms, for the School Board for London:—

Clifton, H. C.	£160	0	0
Chinchen, F. T.	157	0	0
Polden, S.	140	0	0
Cowley and Drake	137	10	0
Lyford, G.	127	0	0
Neal, G., Chilworth-street, W.*	105	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For providing new lavatories in the infants' department of the Boundary-lane School, Camberwell, for the School Board for London:—

Davis Bros.	£194	10	0
Parker, G.	185	0	0
Mitchell and Co.	150	0	0
Goad, W. V.	149	0	0
Marshall, R. A.	147	0	0
Marsland, J., Walworth*	118	0	0

* Recommended for acceptance by the Works Committee.

LONDON.—For interior and exterior painting at the Richard-street Schools, Liverpool-road, for the School Board for London.

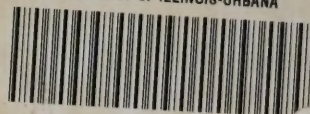
Dearing and Sons	£542	0	0
Vernall, Danes and Co.	517	0	0
McCormick and Sons	445	0	0
Riley, J., 40, North-street, N.*	386	2	0
Morrison and Goodwin	270	10	0
Rowe, G. H.	263	0	0

* Accepted.

LONDON.—For alterations to the "Harry" Tavern, Bromley, E. Messrs. C. Foulsham and Herbert Riches, architects, 3, Crooked-lane, E.C., and Bromley-by-Bow, E.:—

Oldrey and Sons	£1,315	0	0
Robey, J. T.	1,208	0	0
Brown and Kruze	1,152	0	0
Osborn, T., and Sons... ..	990	0	0
Salt, S.	954	0	0
Ellis and Son (accepted)	914	0	0

UNIVERSITY OF ILLINOIS-URBANA



3 0112 004333404